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AN INDEX TO THE MINUTES OF THE INTERNATIONAL PURDUE WORKSHOP ON--ETC(U)
JAN 77 T J WILLIAMS

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INTERNATIONAL WORKSHOP ON
SYSTEMS
AND WORKSHOPS

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This Report is Published as Part of
Engineering Experiment Station Bulletin 143 Series

Schools of Engineering
Purdue University
West Lafayette, Indiana 47907

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER NR049-388	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) AN INDEX TO THE MINUTES OF THE INTERNATIONAL PURDUE WORKSHOP ON INDUSTRIAL COMPUTER SYSTEMS AND ITS PREDECESSOR WORKSHOPS		5. TYPE OF REPORT & PERIOD COVERED Final 2/1/76 - 1/31/77
7. AUTHOR(s) Theodore J. Williams		6. PERFORMING ORG. REPORT NUMBER 88 ✓
9. PERFORMING ORGANIZATION NAME AND ADDRESS Purdue Laboratory for Applied Industrial Control Schools of Engineering, Purdue University West Lafayette, Indiana 47907		8. CONTRACT OR GRANT NUMBER(s) N00014-76-C-0732 ✓
11. CONTROLLING OFFICE NAME AND ADDRESS Department of the Navy Office of Naval Research Arlington, Virginia 22217		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE January 1977
		13. NUMBER OF PAGES 214 + xviii
		15. SECURITY CLASS. (of this report)
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Approved for public release; distribution unlimited.		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report presents an Index of the technical contents of the Minutes of the International Purdue Workshop on Industrial Computer Systems and its predecessor and associated Workshops and Regional Meetings. It includes a list of authors and other contributors, a list of all registrants and a list of the companies and other organizations to which the registrants belonged.		

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REPORT NUMBER 88

Purdue Laboratory for Applied Industrial Control

⑨ Final rept. 1 Feb 76 - 31 Jan 77

⑪ Jan 1977

⑫ 215p.

⑩ Prepared by
Theodore J. Williams

⑮
N00014-76-C-0732

Prepared for

Department of the Navy
Office of Naval Research

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FOREWORD

This work is being carried out to make the results of the work of the International Purdue Workshop on Industrial Computer Systems more readily available to the user community who may profit from it.

This material is being published as part of Contract N00014-76-C-0732 with the Office of Naval Research, United States Department of the Navy, entitled, The International Purdue Workshop on Industrial Computer Systems and Its Work in Promoting Computer Control Guidelines and Standards.

This contract provides for this Index of the contents of the several Workshop Minutes, an editing of the significant material developed by the Workshop participants and a summary document describing the Workshop and its operation.

We are grateful to the United States Navy for their great help in this regard.

Theodore J. Williams

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SYMBOLOLOGY AND GLOSSARY

INDEXING SYMBOLOLOGY

All references to the Workshop Minutes in this Index are coded as follows:

a b, c, d

where,

a, designates the number of the meeting in a particular series if there is more than one of these.

b, denotes the Workshop series involved.

c, denotes the volume or part number of the Minutes of a particular meeting if more than one - Roman numerals

d, the page number or numbers.

As an example, page 229 of Part I of the Minutes of the Second Annual Meeting of the International Purdue Workshop on Industrial Computer Systems would be

2A, I, 229

Likewise, a reference including pages 9 and 19 of the Minutes of the Workshop on Manufacturing Languages and Software Systems would be

M, 9, 19

Code a was not used in this particular example since there was only one volume of the Minutes of that Workshop.

Under b the following symbols will be used:

L - Purdue Workshop on Standardization of Industrial Computer Languages (9 total)

H - Purdue University Meetings of the ISA Computer Control Workshop (3 total)

- A - Annual Meetings, International Purdue Workshop on Industrial Computer Systems (3 reported, 1973-1975)
- R - Spring Regional Meetings, International Purdue Workshop on Industrial Computer Systems (3 reported, 1974-1976)
- M - Workshop on Manufacturing Languages and Software Systems (1 only held, i.e., no code used under letter a here)

NOTES

1. Listings of companies in the subject index indicates the locations of technical contributions made by employee workshop attendees and contributions in the name of the company itself instead of in their own name.
2. Educational and academic titles of authors and contributors have been included in the Index of Authors and Contributors however and whenever supplied by these individuals with their writings. We regret any omissions or incorrect listings which may have occurred here.
3. Because of the different styles of producing Lists of Registrants and Attendees between the different Regional Branches and the different Workshop Meetings (i.e., some included titles, some did not,) all educational and academic titles have been deleted from the List of Workshop Registrants.
4. Organizations whose names are commonly abbreviated in everyday practice, such as IEEE for the Institute of Electrical and Electronic Engineers, are so listed as their main listing in this Index.

GLOSSARY OF ABBREVIATIONS

A listing of common organizational abbreviations along with several acronyms from the computer field as used in this Index. In most cases acronym names of computer languages are not included.

ACAC	Associate Committee for Automatic Control of Canada
ACOS	Automatic Control Systems Division of the Instrument Society of America
ALCOA	Aluminum Company of America
ANSI	American National Standards Organization
APT	Automatic Programmed Tools, A Language for Programming Machine Tools
ARC	Automation Research Council, A Standing Committee of the American Automatic Control Council
BASF	Badische Anilin und Soda Fabrick, A German Chemical Company
CAMAC	Computer Aided Measurement and Control, A Set of Standards for Hardware for the Nuclear Instrumentation Field
CAM/I	Computer Aided Manufacturing - International, A Promotional Organization for that Field

CERCI	A French Systems Engineering Company Active in the Computer Field
CHEMPID	Chemical and Petroleum Industries Division of the Instrument Society of America
CRT	Cathode Ray Tube
DAC	Data Acquisition and Control Committee, Computer Society, Institute of Electrical and Electronic Engineers
DAHCOB	Data Handling and Computations Division of the Instrument Society of America
ECMA	European Computer Manufacturers Association
ESONE	European Standard of Nuclear Electronics
FORTREV	The Revision of the FORTRAN Standard Now (1977) Under Study
HDLC	High Level Data Link Control, A Message Transfer Protocol Now Being Standardized (1977)
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronic Engineers
IFAC	International Federation of Automatic Control

IFIP	International Federation for Information Processing
ISA	Instrument Society of America
ISO	International Standards Organization
JEIDA	Japanese Electronic Industries Development Association
LTPL	Long Term Procedural Language
MACTAB	Measurement and Control Technical Advisory Board of ANSI (superseded by MACSMB)
MACSMB	ANSI Measurement and Control Standards Management Board
NIM	Nuclear Instrument Modules Working Group, National Bureau of Standards
POL	Problem Oriented Language
SC	Standards Committee
SDLC	Synchronous Data Link Control, A Data Transfer Protocol Developed by the IBM Company
SESA	A French Systems Engineering Company Active in the Computer Programming Field

SINTEF	The Industrial Research Agency of the Technical University of Norway, Trondheim, Norway
TC	Technical Committee
VDI/VDE	The German Professional Engineering Society
WG	Working Group

BACKGROUND INFORMATION ON THE WORKSHOP

The International Purdue Workshop on Industrial Computer Systems, in its present format, came about as the result of a merger in 1973 of the Instrument Society of America (ISA) Computer Control Workshop with the former Purdue Workshop on the Standardization of Industrial Computer Languages, also co-sponsored by the ISA. This merger brought together the former workshops' separate emphases on hardware and software into a stronger emphasis on engineering methods for computer projects. Applications interest remains in the use of digital computers to aid in the operation of industrial processes of all types.

The ISA Computer Control Workshop had itself been a renaming in 1967 of the former Users Workshop on Direct Digital Computer Control, established in 1963 under Instrument Society of America sponsorship. This Workshop in its annual meetings had been responsible for much of the early coordination work in the field of direct digital control and its application to industrial process control. The Purdue Workshop on Standardization of Industrial Computer Languages had been established in 1969 on a semiannual meeting basis to satisfy a widespread desire and need expressed at that time for development of standards for languages in the industrial computer control area.

The new combined international workshop provides a forum for the exchange of experiences and for the development of guidelines and proposed standards throughout the world.

Regional meetings are held each spring in Europe, North America and Japan, with a combined international meeting each fall at Purdue University. The regional groups are divided into several technical committees to assemble implementation guidelines and standards proposals on specialized hardware and software topics of common interest. Attendees represent many industries, both users and vendors of industrial computer systems and components, universities and research institutions, with a wide range of experience in the industrial application of digital systems. Each workshop meeting features tutorial presentations on systems engineering topics by recognized leaders in the field. Results of the workshop are published in the Minutes of each meeting, in technical papers and trade magazine articles by workshop participants, or as more formal books and proposed standards. Formal standardization is accomplished through recognized standards-issuing organizations such as the ISA, trade associations, and national standards bodies.

The International Purdue Workshop on Industrial Computer Systems is jointly sponsored by the Automatic Control Systems Division, the Chemical and Petroleum Industries Division, and the Data Handling and Computations Division of the Instrument Society of America, and by the International Federation for Information Processing as Working Group 5.4 of Technical Committee TC-5.

The Workshop is affiliated with the Institute of Electrical and Electronic Engineering through the Data Acquisition and Control Committee of the Computer Society and the Industrial Control Committee of the Industrial Applications Society, as well as the International Federation of Automatic Control through its Computer Committee.

Please see Report Number 77 of the Purdue Laboratory for Applied Industrial Control, entitled, The International Purdue Workshop on Industrial Computer Systems and Its Work in Promoting Computer Control Guidelines and Standards, revised September 1976, a document in this series, for a more complete discussion of Workshop organization and operation.

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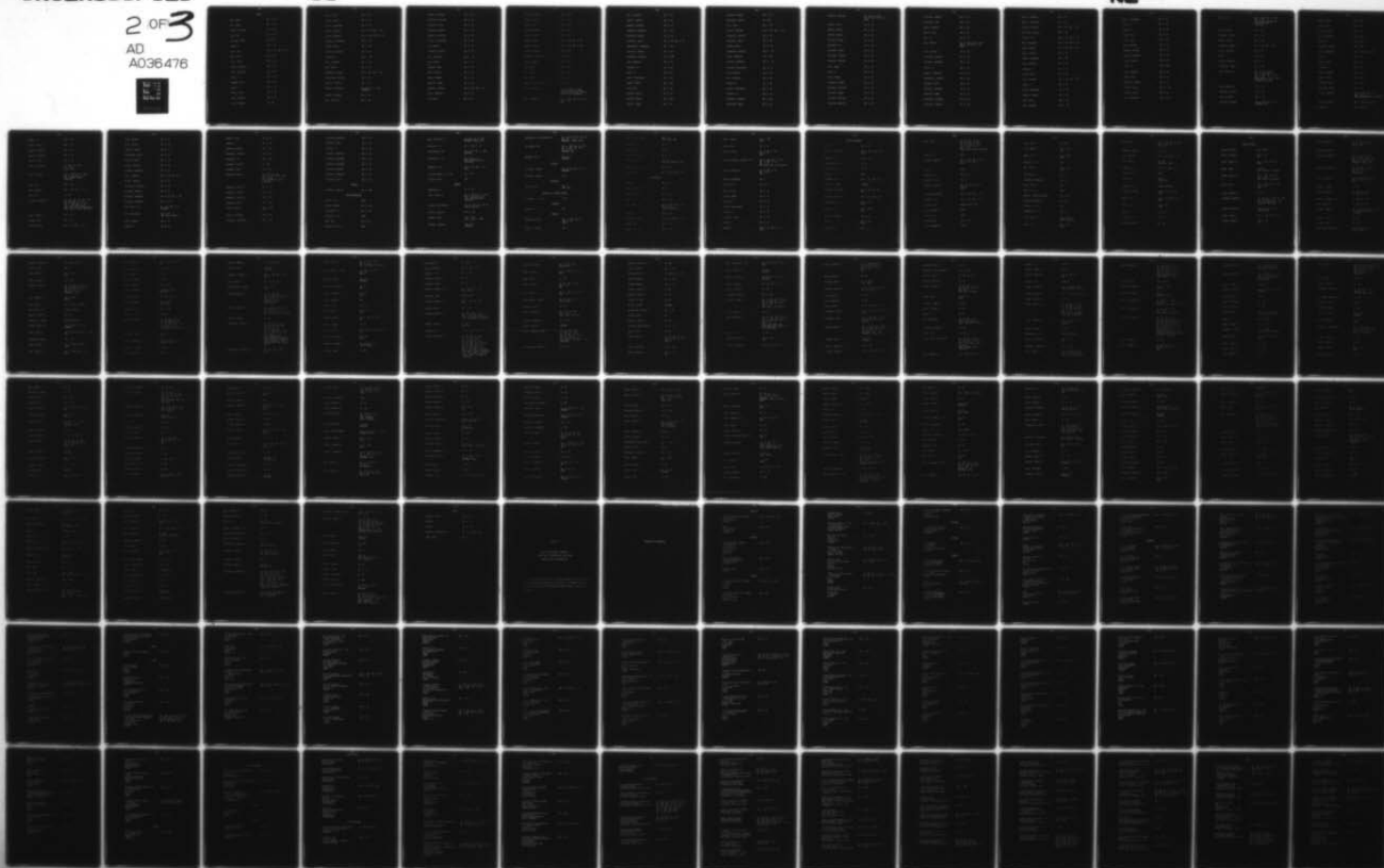
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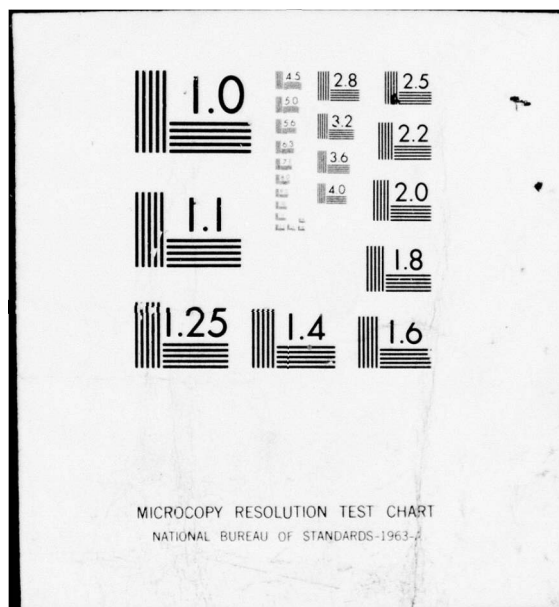
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Gray, Ivor	1L, 88; 2L, I, 76; 3L, I, 181; 4L, 316; 5L, 193; 8L, I, 115; 1A, I, 185; 1R, 8; 3R, I, 61 Chm. LTPL-E; POL; Steering
Hake, R. B.	LTPL
Halsall, James R.	1A, I, 185; 2A, I, 232; 3A, I, 143; 1R, 8 IDT
Har, R.	LTPL
Harte, H. F.	3R, I, 17
Hendry, J. M. G.	3R, I, 9
Heywood, Peter W.	5L, 193; 8L, I, 114; 9L, 93 LTPL
Hockey, William H.	2R, I, 15; 3R, I, 18
Holmes, G. W.	2R, I, 15; 3R, I, 18
Hooton, I. N.	BASIC; IDT; LTPL
Hutty, Roger C.	LTPL
Jones, N. V.	LTPL
Jordan, Neil	3R, I, 15
Leece, Norman L.	3H, 64

Long, John P.	4L, 313
Long, Robert J.	8L, I, 115 LTPL
Magee, R. N.	2A, I, 232 LTPL
Malsall, J. R.	IDT
May, Peter A.	2L, I, 78 LTPL
McCormick, J.	1R, 8
McDermott, Edward W.	3H, 64
Moir, Chris I.	IDT
Neve, N. J. F.	LTPL
Newton, Richard Stephen	3R, I, 16
Nicholls, Beverly A.	6L, 104
Notley, J. P. W.	IDT
Penniall, Th. H.	2R, I, 9
Pike, Keith A.	2A, I, 227 Safety and Sec.
Pyle, I. C.	3R, I, 19 LTPL

Reed, James	1A, I, 184; 2A, I, 231; 2R, I, 11; 3R, I, 12 LTPL; POL
Rummler, David C.	3R, I, 16
Sabo, David S.	1A, I, 185; 3R, I, 59
Sage, Morley	1L, 88 Glossary; LTPL
Scanlon, J. P.	2R, I, 9; 3R, I, 9
Shorter, D. N.	LTPL
Taylor, A.	1R, 8 LTPL; POL
Thompson, K.	Safety and Sec.
Turner, Geoffrey	2L, I, 75; 7L, 149 LTPL
Wand, I. C.	2R, I, 16; 3R, I, 19 LTPL
Webb, J. T.	2R, I, 14 LTPL
Wild, A.	3R, I, 12
Wright, S. B.	3R, I, 9
Wright, Trevor J.	4L, 313

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Aamand, Carsten	Func. Rqmts.
Abbott, Douglas	3R, I, 64 IDT
Adams, Daniel W.	2A, I, 228; 1R, 170 LTPL
Adams, James	1L, 85 Func. Rqmts.; Glossary
Adams, Merritt E.	1A, I, 190; 1R, 175; 3R, I, 66 Chm. LTPL-A; Steering
Adix, Mary S.	1A, I, 184; 2A, I, 231; 3R, I, 60 LTPL
Adney, Eugene M.	6L, 106
Aldredge, Edmond S.	1L, 90; 2L, I, 79; 4L, 318; 5L, 196; 6L, 106 Chm. Glossary; Chm. Man/ Machine; Steering
Alford, Joseph S.	3H, 64; 2A, I, 230 Man/Machine
Allen, Bruce S.	1A, I, 181; 3R, I, 57
Alshuk, Thomas J.	2A, I, 230 IDT

Appleby, Robert H.	1L, 86; 2L, I, 75; 3L, I, 180; 7L, 148 Bylaws; LTPL
Aronson, Richard L.	7L, 148
Arthur, Alexander J.	3L, I, 181; 5L, 194; 6L, 105; 7L, 150; 8L, I, 115; 3A, I, 143; 2R, I, 73; 3R, I, 61 FORTRAN: SP61; LTPL
Augenstein, Paul M.	3H, 66; 3A, I, 146; 1R, 174; 2R, I, 77; 3R, I, 65 Man/Machine
Avery, William L.	2A, I, 229; 3A, I, 140; 1R, 170; 2R, I, 72 IDT
Bahadur, Chance	1L, 87
Bailey, Samuel J.	1L, 86; 2L, I, 74; 5L, 192; 1H, 28
Baker, A. Landon, Jr.	1L, 89; 2L, I, 78
Baker, Dale A.	7L, 148; M, 183
Bannon, James K.	2H, 116; 3H, 65; 1A, I, 186 Chm. Safety and Sec.; Steering
Barker, John E.	9L, 94
Barnes, Russ Y.	5L, 191
Barnstone, Leonard A.	1L, 87; 2L, I, 75 Func. Rqmts.

Bartells, Philip S.	7L, 147; 1H, 27
Barton, Dave	IDT
Bass, Henry K.	2L, I, 76 POL
Bates, Albert R.	3R, I, 61
Bearden, Felix E.	9L, 96; 1A, I, 187; 2A, I, 234; 3A, I, 144; 1R, 173; 2R, I, 75; 3R, I, 63 FORTRAN: SP61
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Belt, John E.	1A, I, 181; 1R, 169
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Bensky, Lowell S.	1R, 175
Bentsen, P. Craig	Safety and Sec.
Bercaw, Robert W.	1A, I, 187; 2R, I, 75 FORTRAN
Berka, Paul H.	2H, 115; 3H, 63; 1A, I, 181 IDT
Bernhardt, Robert	3R, I, 59
Berta, Kornel	3L, I, 179; 5L, 192 LTPL
Beth, Allan, F.	3A, I, 139; 2R, I, 71 POL

Bishop, Asa O.	2A, I, 237; 2R, I, 77 POL
Black, Gerald	3L, I, 182
Boe, Thomas E.	9L, 95
Borisch, Donald J.	M, 183
Borton, David P.	2A, I, 231
Bourne, Edward J.	1L, 85; 9L, 97 Glossary
Brevik, Daniel	1L, 86; 2L, I, 75
Brevik, Dennis J.	3L, I, 180 LTPL; POL
Briddell, E. T.	1A, I, 188
Brinson, A. J.	1L, 88
Bristol, Edgar H.	1L, 87; 2L, I, 76; 3L, I, 180; 5L, 193; 7L, 149; 9L, 93; 1A, I, 184; 3A, I, 141 Chm. Opr. Sys.-A; Glossary; POL; Steering
Brown, H. Dean	1L, 89 POL
Brown, William V.	1R, 170; 3R, I, 58 Safety and Sec.
Burgeson, John W.	M, 184
Burt, Donald A.	1H, 32

Butler, James L.	9L, 93; 1H, 28
Byatt, Frank	1L, 90 Glossary
Campbell, Robert L.	8L, I, 115; 3R, I, 60 LTPL
Carl, Harry L.	9L, 94; 1R, 171
Carlo-Stella, Guedo	2L, I, 74 POL
Caro, Richard H.	9L, 93; 3H, 64; 1A, I, 184; 3A, I, 141; 1R, 171; 2R, I, 73; 3R, I, 60 FORTRAN: SP61; Man/Machine
Carroll, Robert F.	2A, I, 227; 3A, I, 140; 1R, 169; 2R, I, 72; 3R, I, 58 Chm. Man/Machine; Steering
Carter, James R.	M, 184
Cartright, Lionel M.	1L, 88; 2L, I, 77; 3L, I, 180; 4L, 316; 5L, 194; 6L, 105; 9L, 95; 3H, 64; 1A, I, 186; 2A, I, 233; 3A, I, 143; 2R, I, 74; 3R, I, 62 Chm. Nominations; Chm. Organization; Chm. Purdue America; FORTRAN: SP61; Glossary; LTPL; Man/Machine; POL; Steering
Castellan, N. John, Jr.	9L, 95; 2A, I, 232 POL

Castoe, Ruth A.	4L, 317; 5L, 195; 8L, I, 113 Chm. Glossary; Steering
Chew, Robert L., III	4L, 316; 5L, 194; 6L, 105 LTPL
Chhabra, Paul S.	2R, I, 77 FORTRAN
Christy, Bettylou	9L, 92 POL
Clancy, Gerald F.	7L, 148 LTPL
Clark, Charles	IDT
Clark, D. R.	3H, 63
Cline, Marvin	2L, I, 77 POL
Clough, John E.	1A, I, 182; 1R, 170 POL
Coffey, Thomas	1H, 30
Cohen, Louis W.	4L, 313; 5L, 191; 6L, 103 POL
Conley, Richard M.	2H, 118 IDT
Connolly, George R.	1L, 85; 2L, I, 74 Func. Rqmts.
Conover, James	1L, 89

Cook, Dale C.	7L, 150
Cook, Richard M.	1L, 87; 2L, I, 76
Cooper, J. D.	3A, I, 145
Corcoran, Terry C.	9L, 94
Costrell, Louis	3H, 65
Cousins, Andrew S. R.	3L, I, 181; 4L, 317 Func. Rqmts.
Cromwell, Nick	Man/Machine
Crosier, Robert G.	2A, I, 228; 1R, 169 IDT
Crouse, Gary D.	2A, I, 228
Crowder, Robert S.	2H, 115; 1A, I, 183; 2R, I, 72; 3R, I, 59 Wksp. Vice Chm. Planning; Chm. Man/Machine; Steering
Cugini, John C.	1L, 86 Steering
Cunneen, W. J.	1L, 85; 2L, I, 74
Curtis, Richard L.	1L, 85; 2L, I, 74; 3L, I, 179; 4L, 313; 6L, 103; 7L, 147; 8L, I, 113; 9L, 91; 1H, 27; 2H, 115; 3H, 63; 1A, I, 181; 2A, I, 227; 3A, I, 139; 1R, 169; 2R, I, 71; 3R, I, 57 Wksp. Vice Chm. Planning; Chm. Func. Rqmts.; FORTRAN; IDT; POL; Repr. IEEE DAC Comm.; Repr. ISA DAHCOB; Steering

Dallimonti, Renzo	1H, 29; 2H, 116 Man/Machine
Daniel, Robert	3A, I, 146; 2R, I, 77 LTPL
Darge, Don P.	7L, 149
David, Gary W.	9L, 91; 3A, I, 139; 2R, I, 71 POL
Day, Robert E.	1A, I, 182; 2A, I, 228 IDT
Deliyannides, John S.	1L, 90; 2L, I, 77 Func. Rqmts.
Denning, Peter J.	1R, 174
Dennis, Ralph C.	5L, 193; 6L, 104; 8L, I, 114 Chm. LTPL; Steering
Deramo, Anthony D.	3R, I, 66
Dhawan, Satish	FORTRAN
Diehl, Wanderly (Van)	1L, 87; 2L, I, 75; 5L, 192; 7L, 148; 9L, 94; 1A, I, 184; 2A, I, 231; 3A, I, 142; 1R, 171; 2R, I, 73 Chm. BASIC; FORTRAN: SP61; Steering
Di Pasquale, Peter S.	2L, I, 75

Dirksen, Gordon F.	M, 186
Dixon, James P.	3R, I, 63
Dobrohotoff, V. V.	1L, 88; 2L, I, 77
Dodd, Donald R.	3A, I, 141
Dowling, Thomas	3R, I, 63
Drewry, Robert G.	M, 185
Duggins, Baden C.	1H, 30
DuPont, W. Dan	9L, 96
Earley, Walter	FORTTRAN
Easterling, Robert T.	3R, I, 58
Eccles, Terry	POL
Egbert, James R.	1H, 28
Eibling, Edward Ellis	2R, I, 72
Eilert, Esto	1H, 30
Ekas, Gary E.	1L, 85; 2L, I, 74; 3L, I, 179; 4L, 313; 5L, 191 LTPL
Ellis, Melvin E.	1A, I, 181
Ellis, Robert A.	2R, I, 77 POL

Emery, Charles C., Jr.	2L, I, 79; 3L, I, 183 LTPL
Engel, Frank, Jr.	1R, 175 FORTRAN
Epperly, Albert D.	1L, 86; 8L, I, 114 FORTRAN
Farmer, Charles	1R, 171; 3R, I, 61
Farrar, David R.	7L, 151
Fassbender, Paul	1A, I, 182
Federici, James T.	1H, 31; 2H, 117; 3H, 66; 1A, I, 188; 2A, I, 236; 3A, I, 146; 1R, 174; 2R, I, 77 IDT; Repr. ISA CHEMPID
Fertik, Harry A.	1H, 30
Field, William B.	1H, 31; 2H, 118; 3H, 66; 1A, I, 189; 2A, I, 236; 3A, I, 147; 1R, 175; 2R, I, 77 Wksp. Vice Chm. for Planning; Chm. Safety and Sec. Steering
Fisch, S. M.	1L, 88
Fischer, Melvin M.	1A, I, 186 IDT
Fischer, Michael	2A, I, 235; 2R, I, 75

Flath, Richard C.	3L, I, 181; 4L, 317; 5L, 194; 6L, 105; 3A, I, 144; 1R, 173; 3R, I, 62 POL
Ford, Donald F.	1L, 88
Foreman, Roger	3L, I, 180 Func. Rqmts.
Fortier, James B.	2A, I, 234; 3A, I, 145; 1R, 174; 2R, I, 75
Fox, David N.	1L, 89
Fox, Kenneth A.	M, 184
Frey, Andrew	3L, I, 181; 3A, I, 142
Friedman, Stan W.	2L, I, 76; 3L, I, 181 LTPL
Froggatt, Jack	2A, I, 237; 3A, I, 147; 2R, I, 78; 3R, I, 66 FORTRAN
Frost, David R.	2L, I, 76; 3L, I, 180; 1A, I, 184; 2A, I, 232; 1R, 172; 2R, I, 73; 3R, I, 61 FORTRAN: SP61; LTPL
Fugate, Lloyd	2R, I, 72 FORTRAN
Fulco, Leonard J.	3R, I, 64
Furlan, Thomas M.	3A, I, 143; 3R, I, 62

Gabriel, Walter J.	9L, 96
Gaitonde, Narendranath Y.	3L, I, 180
Gallier, Paul W.	1L, 89; 4L, 317
Gardner, Charles J.	1L, 86
Gaspar, Thomas G.	1L, 88; 2L, I, 77; 3L, I, 181; 4L, 317; 5L, 194 Chm. POL; Steering
Geiger, Alan	2L, I, 77 LTPL
Gerstner, James L.	4L, 314
Gilmore, Loren D.	M, 185
Glahn, G. L.	1L, 87
Goff, Kenneth W.	1H, 30; 2H, 116; 1A, I, 186; 1R, 173 Repr. ISA ACOS; Steering
Goldsberry, Verne W.	4L, 314
Gomola, John	1L, 90; 2L, I, 79
Gordon-Clark, Matthew R.	1L, 89; 3L, I, 182; 4L, 318; 5L, 195; 9L, 96; 2A, I, 235; 1R, 174; 2R, I, 76; 3R, I, 64; M, 185 Chm. FORTRAN; SP61; Steering
Gore, Raymond A.	1A, I, 187; 1R, 173

Gorman, J. E.	1L, 90
Gorney, Robert J.	2H, 115
Gornick, Ronald L.	1H, 28; 2H, 115 IDT
Gracey, J. O.	Glossary
Grader, Jerome E.	1H, 31; 1A, I, 188. Repr. CHEMPID; Steering
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Green, Victor H.	1R, 172
Griem, Paul D., Jr.	1L, 89; 2L, I, 79; 3L, I, 180; 5L, 193; 9L, 93; 1A, I, 184; 2A, I, 230; 1R, 171; 2R, I, 73 Chm. LTPL-A; FORTRAN; Glossary; Steering
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Grush, Hubert L.	7L, 148
Gunderlach, R. W.	Safety and Sec.
Guyette, Richard R.	2A, I, 232 IDT
Haberman, Lawrence K.	3L, I, 179
Hall, Roger G.	9L, 97; 3A, I, 146; 2R, I, 77; 3R, I, 65 Chm. POL-A; Steering

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Hanson, N. M.	Func. Rqmts.
Harmala, Arthur D.	7L, 147; 3H, 63 LTPL
Harmer, Donald R.	2H, 117 Safety and Sec.
Harris, Laurence N.	1L, 90; 3L, I, 183; 5L, 196 Bylaws; Func. Rqmts; IDT
Harris, William J.	1L, 89; 2L, I, 78; 3L, I, 182 Func. Rqmts.; Glossary
Harrison, Thomas J.	1L, 88; 2L, I, 76; 3L, I, 181; 4L, 316; 5L, 194; 9L, 94; 1H, 30; 2H, 116; 1A, I, 185; 2A, I, 232; 3A, I, 143; 1R, 172; 2R, I, 12, 73; 3R, I, 28, 61 Wksp. Vice Chm. for Standards; Bylaws; FORTRAN; Glossary; IDT; POL; Safety and Sec.; Steering
Hart, Robert R.	6L, 104
Harter, Edgar J.	1L, 86; 2L, I, 75; 4L, 314; 5L, 192 LTPL

Hartmann, Don W.	1L, 85; 2L, I, 74; 3L, I, 179; 7L, 147 Chm. POL; Steering
Hartway, Bobby L.	1A, I, 187; 2A, I, 233; 3A, I, 144; 1R, 173; 2R, I, 75; 3R, I, 63 Man/Machine
Harvey, Glenn F.	Glossary
Haskell, Conrad C.	3A, I, 147; 3R, I, 65 FORTRAN
Hatlestad, Wes	1L, 87
Hauber, Vincent	1R, 172
Hayner, Willis J.	M, 184
Heath, King R.	8L, I, 117; 9L, 97 Glossary, LTPL; POL
Henn, H. C.	Man/Machine
Henry, Michael C.	1A, I, 182
Herbster, John F.	2A, I, 228 Chm. BASIC; Steering
Herman, David	2A, I, 229; M, 183 BASIC
Hibbs, Duane R.	1L, 88
Higham, John D.	7L, 151
Hill, Howard A.	1H, 32

Hill, Paul C.	2L, I, 79; 3L, I, 182; 4L, 318; 5L, 196; 6L, 106; 8L, I, 117; 9L, 98; 1A, I, 189 Chm. Glossary; POL; Steering
Hoag, John	1L, 87
Hober, Charles	1H, 28
Hohmeyer, Robert E.	1L, 86; 2L, I, 74; 3L, I, 179 FORTRAN: SP61; POL
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Holscher, John W.	3H, 65
Hopwood, Norman	M, 183
Hotmer, Paul A.	1A, I, 187 FORTRAN
Hoyte, David W.	7L, 150 LTPL
Hruskoci, John Allen	1A, I, 186; 2A, I, 233; 3A, I, 143; 1R, 172; 2R, I, 74; 3R, I, 62 Chm. IDT; Steering
Hudson, Chris A.	M, 186
Hughes, James D.	1L, 87
Hughes, John B.	2A, I, 234 LTPL
Hughes, Oscar M.	6L, 106

Huth, Ralph F.	1H, 31
Ianculescu, George	5L, 195
Imboden, Jerold	3R, I, 65
Jack, Carl W.	2A, I, 236
Jaeger, Richard C.	2H, 116; 3H, 64; 1R, 172 IDT
Janjecic, George A.	2A, I, 233 BASIC
Jarvis, Paul H.	1L, 87; 3L, I, 180; 4L, 315 FORTRAN: SP61
Johnson, Walter F.	1L, 89
Jones, Charles E.	2R, I, 71; 3R, I, 57
Jones, David F.	7L, 153; 8L, I, 118; 9L, 98; 2A, I, 237; 3A, I, 147; 3R, I, 66 LTPL; POL
Jones, Lloyd W.	1L, 85 Glossary
Katzif, Jeffrey A.	8L, I, 116 LTPL
Katzman, James A.	3L, I, 181
Kaventsky, Ed	FORTTRAN
Keil, Ron B.	1H, 29; 2H, 116 IDT

Keller, Raymond G.	2A, I, 229
Kelly, Eugene A.	1L, 88; 2L, I, 77; 3L, I, 181; 4L, 316; 5L, 194; 6L, 105; 9L, 95 Chm. FORTRAN; Chm. SP61 Steering
Kempfer, Donald G.	2L, I, 76; 3A, I, 146; 2R, I, 76; 3R, I, 64 Func. Rqmts.
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Kim, C. H.	1L, 90
Kimball, Sandra T.	6L, 105
Kintner, Paul M.	3R, I, 59
Klaisner, Lowell A.	2H, 116; 3H, 65; 1A, I, 186; 1R, 173; 2R, I, 74 IDT
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Koeller, Richard D.	1L, 88
Koenig, Norman F.	1L, 86; 1H, 28
Korzenecki, T. R.	1H, 30
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Krejci, Henry F.	3L, I, 180; 5L, 192; 6L, 103

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Kurkjian, Robert	POL
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Landeck, Bruce W.	1L, 88
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Leininger, Jack A.	M, 184
Lerman, Kenneth	1R, 169 FORTRAN; POL
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Lewish, William T.	5L, 192 FORTRAN

Lindes, Peter	3L, I, 181; 4L, 315; 5L, 193; 6L, 105; 7L, 150; 8L, I, 115 LTPL
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Loper, Warren Edward	3A, I, 145; 3R, I, 18, 65; FORTRAN; LTPL
Loveman, David B.	8L, I, 116 LTPL
Loving, Donald K.	8L, I, 118 LTPL
Luekens, Thomas L.	1A, I, 186; 2A, I, 233; 3A, I, 144; 1R, 173; 3R, I, 62 FORTRAN: SP61
Lumb, Arthur C.	2L, I, 78; 9L, 96; 3H, 65 Man/Machine
Lyon, William T.	9L, 91; 1A, I, 181; 3A, I, 144; 3R, I, 62 LTPL; POL

Mabley, Frank H.	M, 185
Mahoney, Gerald E.	1H, 29
Maloney, Patrick G.	9L, 94
Manies, Ralph G.	7L, 150
Marcum, Stephen R.	2A, I, 237 IDT
Marino, Paul K.	3A, I, 140
Markillie, William R.	1H, 32; 2A, I, 237 Safety and Sec.
Martino, Fred J.	2R, I, 74 Man/Machine
Marvel, John E.	6L, 106
Matesa, Joseph M.	1H, 30
Mathiason, Ladd J.	1L, 88 Func. Rqmts.; Glossary
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Mattheiss, Paul K.	1L, 89; 2L, I, 78; 3L, I, 182 FORTRAN: SP61
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McDonald, John A.	M, 183
McGill, Andrew	1L, 90
McGoldrick, Patrick R.	M, 185
McGovney, John E.	1A, I, 186; 2A, I, 233 FORTRAN
McGregor, Donald B.	3L, I, 181; 4L, 316 FORTRAN
McKnight, Vincent	3R, I, 65
Mehlhope, Kenneth D.	M, 183
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Merritt, Rich L.	2R, I, 74
Messare, Remsi R.	3R, I, 59
Miller, Gerald S.	1L, 86; 2L, I, 74 POL
Miller, James S.	3R, I, 14, 62 LTPL
Miller, William L.	3A, I, 139; 3R, I, 57 FORTRAN

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Norin, Scott L.	3A, I, 140 FORTRAN
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O'Donnell, John R.	3H, 63
Oerter, George W.	1L, 88; 2L, I, 77; 3L, I, 181; 4L, 317; 5L, 194; 7L, 151 FORTRAN; SP61; Glossary; LTPL
Okura, Tsunehiko	2L, I, 78 POL
Olson, Marlyn R.	9L, 97
Opie, Stephen R. B.	1L, 87; 2L, I, 76 POL
Orem, Frank	1L, 85
Osborn, Philip G.	1R, 174
Osborne, William (Bill) H.	9L, 97 POL
Ostfeld, David M.	1H, 31; 2H, 118; 1A, I, 189 Chm. Man/Machine; POL; Repr. ACOS; Steering
Oswald, Robert S.	1L, 87 Func. Rqmts.
Otto, Robert E.	7L, 149 LTPL
Owens, Ray C.	7L, 152; 8L, I, 117
Palmer, Anthony	3R, I, 60
Park, William T.	M, 186

Parker, Alice C.	3A, I, 140
Parker, Paul E.	3L, I, 182
Parks, Henery	Glossary
Parsons, Alonzo, R.	1A, I, 185
Patel, N. R.	1L, 87
Paulissen, George	2A, I, 235; 2R, I, 76
Pease, Allen F.	5L, 195 Glossary
Pekar, Allen L.	8L, I, 117
Perez, Manuel	3R, I, 59
Perry, Gerald L.	Safety and Sec.
Persons, Clyde O.	1A, I, 183
Petersack, Joe F.	1L, 87; 2L, I, 75 Func. Rqmts.
Peyton, John E., Jr.	9L, 95; 1A, I, 185; 2A, I, 232; 3A, I, 143; 1R, 172; 2R, I, 74; 3R, I, 62 Chm. Glossary; Chm. POL; FORTRAN; Steering
Phillips, Douglas D.	7L, 153; 1H, 32
Pike, Herbert E., Jr.	1L, 87; 2L, I, 76; 3L, I, 180; 4L, 315; 5L, 193; 6L, 104; 7L, 152 Chm. LTPL; Glossary; Steering

Pink, John F.	1H, 30
Pistole, David C.	Func. Rqmts.; Glossary
Pitrak, James E.	1H, 27
Pittman, Vories	2A, I, 233 FORTRAN
Powell, Bruce E.	1L, 86 Func. Rqmts.
Pridmore, James A., Jr.	7L, 147 LTPL
Puckett, Sherman C.	1H, 28
Putman, R. E. J.	Func. Rqmts.
Radcliffe, Phillip S.	1L, 86; 2L, I, 75
Raley, Frank A.	4L, 317
Rasmussen, Joe	1H, 29
Read, Richard	3A, I, 140
Reid, David E.	9L, 92 LTPL
Resch, William A., III	7L, 152; 8L, I, 117; 9L, 97; 2A, I, 236; 3A, I, 146; 1R, 175; 3R, I, 65 FORTRAN; SP61
Riley, Thomas M.	2H, 117; 3A, I, 145

Rinkus, A. C.	4L, 314; 9L, 92; 3A, I, 140; 2R, I, 72 POL
Risku, David M.	1L, 88
Romeu, Frank J.	2L, I, 76
Rominger, Michael C.	3H, 64; 2A, I, 230 Safety and Sec.
Rosica, Gabriel A.	1H, 29; 1A, I, 184
Rowe, Donald L.	4L, 319
Ruebhausen, Fred E.	2L, I, 75; 4L, 314; 5L, 192; 9L, 94; 2A, I, 231; 1R, 171 Chm. POL; Func. Rqmts. IDT; Steering
Russell, R. Douglas	1L, 90; 2L, I, 79 Func. Rqmts.; Glossary
Rutledge, Gary J.	9L, 93; 1A, I, 184 POL
Sage, Redmond T.	7L, 153
Sanders, James C.	2R, I, 71
Saponas, Thomas A.	8L, I, 115; 9L, 94 FORTRAN
Sauer, Wolfgang	M, 183
Saunders, David J.	3A, I, 144 FORTRAN

Saunders, Fredric W.	7L, 149; 9L, 93
Sayer, Madeline	1L, 86 Func. Rqmts.
Schlain, Edward L.	4L, 316
Schoeffler, James D.	1L, 85; 9L, 91 Func. Rqmts.; Steering
Schrodel, Charles S.	5L, 195 FORTRAN
Schultz, Jim	1R, 171
Schunk, Jerry H.	1A, I, 181; 2A, I, 227
Schweifer, Werner	3A, I, 147
Sellars, Harald	2L, I, 75
Sells, John E.	1A, I, 184
Shepherd, Harvey	1L, 86
Shereff, Jesse	1L, 85
Sherman, David	3R, I, 63
Sherman, Richard H.	2H, 117
Shern, Daniel R.	2R, I, 75; 3R, I, 64
Shoemaker, Delbert L.	3A, I, 139
Short, Thomas H.	8L, I, 118 LTPL

Sigler, R. C.	Man/Machine
Signor, Richard W.	3A, I, 141; 2R, I, 73; 3R, I, 60 FORTRAN
Silver, Leonard	1L, 88
Simon, Lyle L.	2A, I, 229; 3R, I, 58; M, 183
Sims, William F.	1L, 90; 2L, I, 79; 3L, I, 183; 5L, 196; 6L, 106; 7L, 153; 2A, I, 237; 3A, I, 147; 1R, 175; 2R, I, 78; 3R, I, 66 Chm. Opr. Sys-A; Func. Rqmts.; Glossary; LTPL
Sisson, Norwood	2R, I, 71
Smith, Richard L.	1A, I, 187
Smolen, Helen	8L, I, 114 LTPL
Solberg, Todd N.	1A, I, 189
Spence, James M.	1L, 90; 2L, I, 79; 4L, 318 Func. Rqmts.
Spencer, Everett H.	2L, I, 76 POL
Spitznas, Raymond J.	1A, I, 182
Sprague, William	1A, I, 184; 3R, I, 60

Stadnick, David H.	2R, I, 71 POL
Stapleford, Kenneth R.	6L, 103
Stapleton, Kenneth	1L, 87
Stein, Philip G.	2A, I, 234 BASIC; FORTRAN
Stella, Richard R.	8L, I, 116
Stenquist, John D.	9L, 95; 3R, I, 63
Stewart, C. Richard	3R, I, 61
Stockwell, Russell W.	2L, I, 76
Stokely, Robert J.	2H, 116; 3H, 64; 1A, I, 184; 2A, I, 231; 1R, 171 Chm. Safety and Sec.; Steering
Stone, Kirby L.	1H, 28
Strother, Robert W.	3R, I, 63
Summers, Bill	9L, 92 POL
Sutter, Neil G.	2R, I, 73
Swanson, Carl D.	1L, 85
Swanson, Donald M.	M, 186

Talbot, James E.	1L, 88; 2L, I, 77; 3L, I, 181 Glossary
Talda, Paul M.	7L, 147; 8L, 113; 9L, 91
Tavano, Richard E.	1R, 173 Man/Machine; POL
Taylor, S.	FORTRAN; SP61
Teeple, C. R.	1R, 170
Temple, R. H.	2L, I, 74; 3L, I, 179 LTPL
Thomas, Richard F., Jr.	9L, 95; 1A, I, 187; 1R, 173
Thomas, T. B.	3L, I, 182 FORTRAN
Thompson, Dick	3R, I, 57
Tiers, John	2R, I, 72
Tobey, Gene	2A, I, 228 IDT; Safety and Sec.
Trinkler, Charles J.	Func. Rqmts.
Troop, James W.	M, 184
Tucker, Robert F., Jr.	2L, I, 77; 5L, 195; 6L, 105; 7L, 151; 2A, I, 234 Func. Rqmts.; Safety and Sec.

Turner, A. E.	3R, I, 66
Turner, Richard L.	7L, 150
Tweed, Thomas M.	7L, 151; 1A, I, 187 LTPL
Ufret, Carlos M.	2A, I, 234; 2R, I, 76
Union, Donald C.	1L, 88 Glossary; Steering
Unklesbay, Kenneth	M, 186
Uram, Robert	1L, 90
Utsumi, Takeshi	1L, 89; 2L, I, 78; 3L, I, 182 POL
Van Naarden, Robert	2A, I, 229
Vander Linden, Ken	3R, I, 65
Vinz, Frank L.	Man/Machine
Vollman, Charles H.	3R, I, 66
Wade, Harold L.	1H, 29
Wagner, Steven J.	3R, I, 60
Wagner, William F.	2L, I, 75 Glossary
Waldmann, Charlie	Man/Machine

Wang, Wilson S.	M, 185
Watson, Gordon M.	7L, 152
Weber, H. L.	1L, 87 Func. Rqmts.; Glossary
Wendt, Richard E., Jr.	1H, 29
Wetherill, Richard H.	3R, I, 58
White, Malcolm E.	M, 186
Wiatrowski, Claude A.	1R, 170 Safety and Sec.
Wilburn, Norman P.	4L, 319; 5L, 196; 6L, 106; 7L, 153 Chm. POL; Steering
Willard, Frank G.	IDT
Willard, Robert E.	3H, 64 Man/Machine
Williams, Theodore J.	1L, 89; 4L, 317; 5L, 195; 6L, 106; 7L, 152; 8L, I, 116; 9L, 96; 1H, 31; 2H, 117; 3H, 65; 1A, I, 187; 2A, I, 234; 3A, I, 145; 1R, 174; 2R, I, 14, 75; 3R, I, 19, 64; M, 185 Wksp. Gen'l. Chm.; FORTRAN; Glossary; Steering
Williams, Wallace D.	1H, 27; 2H, 115; 1R, 170 Chm. Safety and Sec.; IDT; Steering

Williamson, Robert A., Jr.	3A, I, 141; 2R, I, 73; 3R, I, 60
Willmott, Thomas L.	1L, 87; 2L, I, 76; 3L, I, 180; 4L, 315; 6L, 104; 9L, 93; 3H, 64; 1A, I, 184; 2A, I, 230; 3A, I, 140; 1R, 171; 2R, I, 73 Chm. Bylaws; Chm. IDT; FORTRAN; LTPL; Steering
Witte, Bruno F.	3R, I, 65 FORTRAN
Yasnyi, Donald M.	7L, 150 LTPL
Young, Charles	1H, 27
Yunker, Roy W.	1H, 30 Chm. Safety and Sec., IDT; Steering
Zachary, George	3H, 66
Zarrella, John	3R, I, 57
Zartman, William N.	1H, 29
Zgrabik, Larry L.	M, 186
Zinas, Rimas (Ray) A.	7L, 148; 1R, 169; 3R, I, 57 FORTRAN
Zobrist, Dale W.	6L, 103; 7L, 147; 8L, I, 113; 9L, 91; 2H, 115; 3H, 63; 1A, I, 181; 2R, I, 71; 3R, I, 66 Chm. FORTRAN; SP61; IDT; Steering

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Azhogin, Vitaly	2R, I, 74
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Kolotov	3R, I, 13
Kulikov, Vyacheslav F.	3A, I, 145; M, 185
Tamm, Boris	1R, 9

PART IV

LIST OF COMPANIES, RESEARCH
INSTITUTES, UNIVERSITIES AND OTHER
ORGANIZATIONS REPRESENTED

Addresses presented here are those given by the registrants when attending the Workshop in question. No attempt has been made here to keep up with changing company names, missions or locations.

INDUSTRIAL COMPANIES

AUSTRIA

Oester Bundesbahnen GD/IK 2R, I, 14; 3R, I, 16
A-1010 Wien
Seilerstätte 1
AUSTRIA

SGAE 3R, I, 17
Lenaugasse 10
Vienna 1080
AUSTRIA

BELGIUM

Commission Des Commun, 3R, I, 10
Europeennes
JE 4/21A
Rue De La Loi
200 B-1049
Bruxelles
BELGIUM

EBES Grote Netten 3R, I, 11
Merksemsteenweg 233
B-2100 Devrne
BELGIUM

Euratom CBNM 3R, I, 12
BELGIUM

CANADA

Aluminum Company of Canada 1L, 85; 3A, I, 139
(ALCAN)
Arvida
Quebec
CANADA

Canadian Industries, Limited 3R, I, 58
CIL House
Box 10 Montreal
Quebec
CANADA H3C 2R3

Datagen Ltd.
Richelieu Park
Hull, Quebec
CANADA

7L, 148

English Electric - AEI
CDA Limited
766 King Street West
Toronto, Ontario
CANADA M5V 1N7

1A, I, 183; 2A, I, 230

Gulf Oil of Canada
Box 460
Station 4
Toronto 116
CANADA

3A, I, 142

Imperial Oil Enterprises,
Limited
P. O. Box 3015
Sarnia, Ontario
CANADA N7T 7N1

1H, 29; 3A, I, 143;
1R, 172; 3R, I, 62

Ontario Hydro
620 University Avenue
H14 F9
Toronto
Ontario
CANADA M5G 1X6

2A, I, 234; 3A, I, 145;
2R, I, 75

Quebec Iron and Titanium
Corporation
P. O. Box 40
Sorel
Quebec
CANADA

1L, 89; 2L, I, 78; 3L, I, 182;
9L, 96; 1A, I, 187

SIDBEC-DOSCO
Usine de Contrecoeur
C. P. 100
Contrecoeur
P. Quebec
CANADA

3R, I, 64

Taylor Instrument Company
75 Tycos Drive
Toronto
Ontario
CANADA M6B 1N4

3R, I, 65

DENMARK

Christian Rovsing A/S
DK-2730 Herlev 46B
MarieLundvej
DENMARK

2R, I, 10

FINLAND

IBM FINLAND
OY, IBM AB
P.O.B. 265
SF-00101 Helsinki 10
FINLAND

3R, I, 13

FRANCE

CAP-Sogeti-Logiciel
F-92128 Montrouge 5
Rue Louis Leyeune
FRANCE

2R, I, 10; 3R, I, 10

Centre Nucleaire De Saclay
P. O. Box 2
F-91190 Gif-sur-Yvette
FRANCE

3R, I, 10

CERCI
22 rue de Chronne
Paris (11)
FRANCE

3L, I, 179; 4L, 314;
5L, 191

Compagnie Internat
Pour L'Informatique
68 Route Versailles
F-78430 Louveciennes
FRANCE

3R, I, 10

Electricite de France,
Etudes et Recherches
6, Quai Watier
F-78400 Chatou
FRANCE

2R, I, 10; 3R, I, 11

ERIA-ECA-Automation
182 Rue de Vaugirard
F-75015 Paris
FRANCE

3R, I, 11

Ferney-Voltaire
FRANCE

2R, I, 11

IRIA
Domaine de Voluceau
F78150 Rocquencourt
Le ChesNay
FRANCE

3A, I, 144; 2R, I, 12;
3R, I, 14

Orme des Merisiers
F-91190
Gef-sur Yvette
BP 2
FRANCE

2R, I, 14

Philips Gloeilampenfabrieken
105 rue de Paris
93002 Bobigny
FRANCE

7L, 151

Saint-Gobain Techniques
Nouvelles Company
24 Blvd Georges Clemenceau
92400 Courbevoie
FRANCE

1A, I, 188

SESA
23 Avenue de Neuilly
Paris 16ème
FRANCE

2L, I, 78; 3L, I, 182;
4L, 318; 5L, 195

Societe Crouzet
FRANCE

2R, I, 15

Societe d'Etudes des Systemes 2A, I, 235; 3R, I, 17
d'Automation (SESA)
20 rue Jean Jaures
Puteaux
FRANCE 92800

Thomson-CSF 3R, I, 18
Laboratoire Central de
Recherches
Domaine de Corbevilles
F-91401 Orsay
FRANCE

GERMANY

AEG - Telefunken 2A, I, 227; 3A, I, 139;
Buecklestrasse 2R, I, 9; 3R, I, 9
Konstanz D 775
GERMANY

AEG Telefunken 9L 91
50 Hohenzollerndamm
1000 Berlin 33
GERMANY

Brown, Boveri and Cie 4L, 314; 8L, I, 113;
62 Neustadter Street 2A, I, 228; 2R, I, 10;
6800 Mannheim 3R, I, 10
GERMANY

Bundesbahn-Zentralen 2R, I, 10; 3R, I, 10
D-800 München 2
Arnulfstr. 19
GERMANY

DESY - F58 3R, I, 10
Notkestieg 1
D-2000 Hamburg 52
GERMANY

Dornier Systems EET 2R, I, 10; 3R, I, 11
Postfach 648
D-799 Friedrichhafen
GERMANY

ESG - Elektronik Systems
GmbH
Postfach 860305
Arabellastrasse 4
Muenchen D-8
GERMANY

8L, I, 114; 9L, 93;
1A, I, 183; 2A, I, 229;
3A, I, 141; 2R, I, 10, 72

ESOC - European Space
Operations Center
Kernforschungszenstrum
D-61, Darmstadt
Rob. Bosch-Str. 5
GERMANY

2R, I, 11; 3R, I, 12

Fachhochschule FÜR Technik
Speyerer Strasse 4
D 68 Mannheim
GERMANY

3A, I, 141; 3R, I, 12

Fakultaet Fuer Physik
Herrman Herderstr. 3
D-7800 Freiburg
GERMANY

3R, I, 12

Gesellschaft für Kernforschung
Projekt PDV
79 Bismarck Street
F5 Karlsruhe
GERMANY

2A, I, 231; 3A, I, 141;
2R, I, 11; 3R, I, 12, 61

Gesellschaft für Mathematic
und Datenverarbeitung
P. O. Box 1240 Schloss
Birlinghoven
D5205 St. Augustin
GERMANY

3R, I, 13, 61

GPP Gesellschaft für
Prozessrechner-Programmierung
mbH
Balanstrasse 138/I
8 Munchen 90
GERMANY

2A, I, 231; 3A, I, 142;
2R, I, 73

Hahn-Meitner-Institut Fuer Kernforschung Datenverarbeitung und Elektronik Glienicker Str. 100 D-1000 Berlin 39 GERMANY	2R, I, 11; 3R, I, 13
HOESCH-Werk AG Zentrale Datenverarbeitung Northkirchenstr. 101 D-46, Dortmund GERMANY	2R, I, 11; 3R, I, 13
IDAS GmbH (Informations-, Daten- und Automationssys- teme) Kornmarkt 9 Limburg (Lahn) GERMANY 6250	2R, I, 12, 74; 3R, I, 13
INTERATOM D-5060 Bensberg GERMANY	3R, I, 14
Kernforschungsanlage Zentrallab F. Elektronik Postfach 1913 D-5170 Juelich GERMANY	3R, I, 15
KFA Juelich Pier Bauweg 6 BRD Juelich D5161 GERMANY	2A, I, 233
Kloeckner-Werke AG P. O. Box 210220 D-2800 Bremen 21 GERMANY	2A, I, 233; 3R, I, 15
Krantz Computer D 51 Aachen Julicherstrasse GERMANY	3A, I, 144

Math. Beratungs-Und
Programmierungsdienst
Kleppingstr. 26
D-4600 Dortmund
GERMANY

3R, I, 15

Scientific Control Systems
(GmbH) SCS
Oehleckerring 40
D2000 Hamburg 62
GERMANY

1A, I, 188; 2A, I, 235;
3A, I, 146; 2R, I, 14;
3R, I, 17

SCS - Scientific Controls
Systems GmbH
D-4300 Essen 1
III. Hagen 43
GERMANY

2R, I, 14

Siemens AG
Abt. T 2MS
Braunschweig
Acherstr. 22
GERMANY

2R, I, 14; 3R, I, 17

Siemens A. G.
Rheinbrückenstrasse 50
Karlsruhe D-7500
GERMANY

4L, 318; 5L, 195; 6L, 106;
7L, 152; 1H, 31; 2R, I, 14;
3R, I, 17

Siemens Aktiengesellschaft
Erlangen
Gunter Scharowsky Street
852 Erlangen
GERMANY

1A, I, 188

UNICOMP
D-7513
Stutensee-Blankenloch
Singerstr. 3
GERMANY

2R, I, 16

Werkzeugmaschinenlabor
RWTH Aachen
D-5100 Aachen
GERMANY

2R, I, 16

Zenstrallabor f. Elektronik
Kernforschungsanlage Jülich
Postfach 365
D-517 Jülich 1
GERMANY

2R, I, 16

ITALY

Societa Italiana Avionica
Torino
ITALY

2R, I, 15

JAPAN

Ando Denki Co.
4-19-7 Kamata
Ota-ku
Tokyo
JAPAN

3R, I, 29

Anritsu Denki Co.
1800 Onna
Atsugi-shi
Kanagawa Prefecture
JAPAN

2R, I, 39

Asahi Glass Co., Ltd.
2-1-2 Marunouchi
Chiyoda-ku
Tokyo
JAPAN

3R, I, 29

Chino Seisakusho Co.
1145 Kamei
Ohimachi
Iruma city
Saitama
JAPAN

3R, I, 29

Chiyoda Chemical Engineering
and Construction Company,
Limited
1580 Tsurumi-cho
Tsurumi-ku
Yokohama City
JAPAN

4L, 314; 5L, 191; 6L, 103;
7L, 148; 8L, I, 113;
2A, I, 228; 3A, I, 140;
2R, I, 39; 3R, I, 29

Chiyoda Joho Kiki Co., Ltd.
5-3 Kojimachi
Chiyoda-ku
Tokyo
JAPAN

2R, I, 39

Daicel Co.
Azuchimachi
Higashi-ku
Osaka
JAPAN

2R, I, 39; 3R, I, 29

Daido Steel Co., Ltd.
1-11-18 Nishiki
Naka-ku
Nagoya
JAPAN

3R, I, 29

Electrotechnical Laboratory
2 Chome
6-1 Nagata Machi
Chiyodaku
Tokyo
JAPAN 100

2A, I, 229; 2R, I, 39;
3R, I, 37

Electrotechnical Laboratory
Japanese Government
5-4-1 Mukodaimachi
Tanashi-shi
Tokyo
JAPAN

5L, 192; 6L, 104; 8L, I, 114;
2R, I, 39

Fuji Electric Co., Ltd.
1 Fujimachi
Hino-shi
Tokyo
JAPAN

2R, I, 40; 3R, I, 30

Fuji Electric Co., Ltd.
1-1, Tanabeshinden
Kawasaki-ku
Kawasaki-shi
Kanagawa Prefecture
JAPAN

2R, I, 40

Fuji Electric Co., Ltd.
Technical Section of
Water Treatment
11, Yurakucho 1-chome
Chiyoda-ku
JAPAN

2R, I, 40

Fuji Photo Film Co., Ltd.
Minamiashigara
Kanagawa
JAPAN

3R, I, 30

Fujitsu Limited
Furukawa Sogo Bldg.
6-1, Marunouchi 2-chome
Chiyoda-ku
Tokyo 100
JAPAN

2R, I, 40

Fujitsu Limited
1015 Kamikodanaka Nakaharaku
Kawasaki
JAPAN

3A, I, 141; 2R, I, 40;
3R, I, 30

Fujitsu Limited
3-21-8, Nishi-shinbashi
Minato-ku
JAPAN

2R, I, 40

Fujitsu, Ltd.
5-35-10 Shinbashi
Minato-ku
Tokyo
JAPAN

3R, I, 30

Fujitsu Limited
6-1-1, Shinbashi
Minato-ku
JAPAN

2R, I, 40

Fujitsu Limited
1-17-25, Shinkamata
Ota-ku
JAPAN

2R, I, 40

Harami Electric Works, Co. 3996 Izumi-cho Totsuka-ku Yokohama JAPAN	3R, I, 31
Hitachi, Ltd. 1-1 Higashi Koigakubo Kokubungi-shi Tokyo JAPAN	2R, I, 41
Hitachi, Limited 4026 Kuji-machi Hitachi-shi Ibaraki-ken JAPAN	1R, 171
Hitachi Ltd. Naka Works 882 Ichige Katsuta, Ibaraki JAPAN	4L, 316
Hitachi, Limited, Omika Works 5-2-1 Omika Cho Hitachi-Shi Ibaraki-Ken 319-12 JAPAN	5L, 193; 7L, 150; 9L, 94; 1A, I, 185; 2A, I, 231; 3A, I, 142
Hitachi, Ltd. Shiba-Nishikubo-Sakuragawa Minato-ku Tokyo JAPAN	3R, I, 30
Hokushin Electric Works, Limited 30-1 3 Chome Shimomaruko Ohta-Ku Tokyo JAPAN 144	8L, I, 115; 1A, I, 185; 3A, I, 142; 2R, I, 12,41; 3R, I, 31

IBM Japan
3-2-12 Roppongi
Minato-ku
Tokyo
JAPAN

2R, I, 41; 3R, I, 31

Idemitsu Oil Co.
1-1 Miyamae-cho
Tokuyama
Yamaguchi
JAPAN

3R, I, 31

Intel Japan Corp.
1-6-10, Uchikanda
Chiyoda-ku
Tokyo
JAPAN

2R, I, 41

Ishikawajima Harima Heavy
Industry Ltd.
2-2-1 Ohtemachi
Chiyoda-ku
Tokyo
JAPAN

3R, I, 31

Iwatsu Electric Co., Ltd.
2969-1, Ishikawacho
Hachiojishi
Tokyo
JAPAN

2R, I, 41; 3R, I, 31

Iwatsu Electric Co., Ltd.
1-7-4, Kugayama
Suginami-ku
JAPAN

2R, I, 41

Japan Electronic Industry
Development Association
3-5-8 Shiba-koen
Minato-ku
Tokyo
JAPAN

3R, I, 38

Japan National Railway (Laboratory) Kunitachi Tokyo JAPAN	3R, I, 38
Japan Radio Co., Ltd. 5-1-1, Shimorenjaku Mitaka-shi JAPAN	2R, I, 41; 3R, I, 32
Japan System Engineering Co., Ltd. 2-9-20, Shirako Wako Saitama Prefecture JAPAN	2R, I, 41; 3R, I, 32
Kawasaki Heavy Industries, Ltd. 1-1 Kawasaki-cho Akashi-shi Hyogo Prefecture JAPAN	2R, I, 41; 3R, I, 31
Kyowa Electronics Instruments Co. 3 Choufugaoka Chofu-shi Tokyo JAPAN	2R, I, 42
Matsushita Communication and Industrial Co. 4-3-1 Tsunashimahigashi Kohoku-ku Yokohama 223 JAPAN	2R, I, 42; 3R, I, 33
Meidensha Electric Mfg. Co. Ltd. 1-5-2 Kitashinjuku Sinjuku-ku Tokyo JAPAN	2R, I, 42

Meidensha Electric Mfg.
Co., Ltd.
5-5-5 Osaki
Shinagawa
Tokyo
JAPAN

3R, I, 32

Mitsubishi Electric
Corporation
Kamakura Works
325 Kamimachiya
Kamakura City
Kanagawa 247
JAPAN

4L, 317; 6L, 105; 8L, I, 116;
9L, 95; 2A, I, 233; 3A, I, 144;
2R, I, 42, 75; 3R, I, 32

Mitsubishi Heavy Industries,
Ltd.
1-1 Akunoura-machi
Nagasaki
JAPAN

2H, 116

Mitsubishi Heavy Industries,
Ltd.
2-5-1, Marunouchi
Chiyoda-ku
Tokyo
JAPAN

5L, 194; 2R, I, 42;
3R, I, 32

Mitsui Ship-Building and
Engineering Co., Ltd.
3-1-1 Tama
Tamano-shi
Okayama Prefecture
JAPAN

2R, I, 42

Mitsui Ship-Building and
Engineering Co., Ltd.
5-6-4 Chikuzi
Chuo
Tokyo
JAPAN

3R, I, 33

Mitsui Toatsu Chemicals, Inc. 3-2-5 Kasumigaseki Chiyoda Tokyo JAPAN	3R, I, 33
Murata Mfg., Co., Ltd. 1874 Kizuki-Sumiyoshi Nakahara Kawasaki JAPAN	3R, I, 33
Nippon Denso Co., Ltd. 1-1 Shows Kariya Aichi JAPAN	3R, I, 34
Nippon Electric Company, Ltd. 1-10 Nishin-Chiyo Fuchiu-shi Tokyo JAPAN	7L, 151
Nippon Electric Co., Ltd. 33-1, Shiba 5-chome Minato-ku Tokyo 108 JAPAN	2R, I, 43
Nippon Electric Co., Ltd. 4-14-2 Shiba Minato-ku Tokyo JAPAN	5L, 194; 2R, I, 43
Nippon Electric Co., Ltd. 14-2 Shiba-Yonchome Minato-ku JAPAN	4L, 317
Nippon Electric Co., Ltd. 5-7-15 Shiba Minato-ku Tokyo JAPAN	3R, I, 33

Nippon Electronics Co., Ltd. 2R, I, 43
1753 Shimonumabe
Nakahara-ku
Kawasaki-shi
Kanagawa Prefecture
JAPAN

Nippon Keisan Center Co. 3R, I, 34
2-1-10 Nihonbashi
Chuo
Tokyo
JAPAN

Nippon Kokan Co. 3R, I, 34
Ogishima
Kawasaki
JAPAN

Nippon Mini-Computer Co., 2R, I, 43; 3R, I, 33
Ltd.
6-12-20, Jingumae
Shibuya-ku
Tokyo
JAPAN

Nippon Oil Co. 2R, I, 43
1-chome
Nishi-shimbashi
Minato-ku
Tokyo
JAPAN

Nippon Steel Corp. 3R, I, 34
2-6-3 Ohtemachi
Chiyoda-ku
Tokyo
JAPAN

Nissin Electric Co. 2R, I, 43
47 Umezu
Takasecho
Kyoto
JAPAN

Nozomi Denki Co.
Yokohama
Kanagawa
JAPAN

3R, I, 38

Ohkura Electric Co.
3-20-8, Naritanisi
Suginami-ku
Tokyo
JAPAN

2R, I, 43

Oki Electric Industry Co., Ltd.
4-10-12, Shibaura
Minato-ku
Tokyo
JAPAN

2R, I, 44; 3R, I, 34

Oki Electric Industry Co., Ltd.
1-25-36, Nakahara
Mitaka-shi
JAPAN

2R, I, 44

Oki Electric Industry Co., Ltd.
4-10-3, Shibaura
Minato-ku
JAPAN

2R, I, 44

Omika Works of Hitachi Ltd.
Kujimachi
Hitachi-shi
Ibaragi Pref.
JAPAN

2R, I, 44

Omron Tateishi Electronics Co.
20 Igadera
Shimokainji
Namaokakyo
Kyoto
JAPAN

2R, I, 44

Osaka Gas Co.
5-1 Hirano
Higashi
Osaka
JAPAN

3R, I, 34

Osaki Electric Industry
Co., Ltd.
2-2-7 Higashigotanda
Shinagawa
Tokyo
JAPAN

3R, I, 34

Panafacom Limited
2-10-16, Jiyugaoka
Meguro-ku
Tokyo 152
JAPAN

2R, I, 44; 3R, I, 34

Richo Co., Ltd.
12-3 Takashimadai
Kanagawa-ku
Yokohama
JAPAN

2R, I, 44; 3R, I, 35

Ricoh Co., Ltd.
6-14-6, Chuo-ku
Tokyo
JAPAN

2R, I, 44

Shinko Electric Co., Ltd.
Nihonbashi
Chuo-ku
Tokyo
JAPAN

2R, I, 44

Shinko Electric Co., Ltd.
100 Takehana
Ise
Mie
JAPAN

3R, I, 35

Sumitomo Chemical Co., Ltd.
Sumitoma Computer Bldg. 7 fl.
1-2-2, Shinsenri-nishimachi
Toyonaka-shi
Osaka
JAPAN

2R, I, 45; 3R, I, 35

Sumitoma Metal Co. Kashima 750 Hikari Kashima-cho Kashima-gun Ibaragi Prefecture JAPAN	2R, I, 45; 3R, I, 35
Takeda Riken Industry Co., Ltd. 1-16-1, Fujimicho Gyodashi Saitama Prefecture JAPAN	2R, I, 45; 3R, I, 36
Tateishi Electric Co. 2-Igadera Nagaoka-kyo Kyoto JAPAN	3R, I, 36
Tawara Electric Mfg. Co. Ltd. 2-30 Honmachi Fuchu Tokyo JAPAN	3R, I, 36
TELMEC Co. 1 Tohocho Midori Yokohama JAPAN	3R, I, 36
Toa Nenryo Kogyo, Co. 7-1 Ukishima Kawasaki-ku Kawasaki JAPAN	3R, I, 36
Tokyo Denki Tokki KK. 1-31-3, Honcho Nakano-ku Tokyo JAPAN	2R, I, 45

Tokyo Electron Labs Inc. Meiho Bldg. 1-21 Nishishinjuku Shinjuku-ku Tokyo JAPAN	2R, I, 45
Tokyo Gas Co., Ltd. Tokyo JAPAN	2R, I, 45
Tokyo Metropolitan Industrial Technology Center 3-13-10, Nishigaoka Kita-ku Tokyo JAPAN	2R, I, 45
Tokyo Shibaura Electric Co., Ltd. Fuchu Works 1, Toshiba-cho Fuchu-shi Tokyo JAPAN	2R, I, 15, 45, 46; 3R, I, 35
Tokyo Shibaura Electric Company, Ltd. (Toshiba) 2 Shiba-Nishikubo Sakuragawa- cho Minato-ku Tokyo JAPAN 105	5L, 195; 8L, I, 117; 1A, I, 189; 3A, I, 146; 2R, I, 45
Tokyo Shibaura Electric Co., Ltd. 2-9 Suehiro-Cho Ome-City Tokyo 198 JAPAN	4L, 318
Topacs, Inc. 3-2-5, Kasumigaseki Chiyoda-ku Tokyo 100 JAPAN	2R, I, 46; 3R, I, 38

Topacs, Inc.
1-14-14, Nakatehara
Kohoku-ku
Yokohama
JAPAN

2R, I, 46

Toyota Motor Co.
Toyota-shi
Aichi Prefecture
JAPAN

2R, I, 46

Yamatake Honeywell
1-12-2, Kawana
Fujisawa-shi
JAPAN

2R, I, 46; 3R, I, 36

Yamatake Honeywell
Application Engineering Sec.
Computer Control Division
Kanagawa Prefecture
JAPAN

2R, I, 46

Yamatake Honeywell
4-28-1, Nishirokugo
Ota-ku
Tokyo
JAPAN

2R, I, 46

Yamatake Maintenance Co., Ltd.
5-14-1, Kamata
Ota-ku
Tokyo
JAPAN

2R, I, 47

Yaskawa Electric Mfg. Co.,
Ltd.
314 Yukuhashi-shi
Fukuoka Pref.
JAPAN

2R, I, 47

Yaskawa Electric Mfg. Co. 2R, I, 47
 Ltd.
 2346 Fujita
 Yahata-Nishi-ku
 Kitakyushu-shi
 JAPAN

Yaskawa Electric Mfg. Co., 2R, I, 47
 Ltd.
 Saitama prefecture
 480 Kami-Fujisawa
 Iruma
 JAPAN

Yokogawa Electric Works, Ltd. 2R, I, 47
 c/o Mitsui Bldg.
 5-7, Yaesu
 Chuo-ku
 Tokyo
 JAPAN

Yokogawa Electric Works, 7L, 153; 1A, I, 190;
 Limited 2R, I, 47; 3R, I, 37
 2-9-32 Nakacho
 Musashino-shi
 Tokyo 180
 JAPAN

Yokogawa-Hewlett-Packard Co. 2R, I, 47
 9-1, Takakura-cho
 Hachioji-shi
 Tokyo
 JAPAN

MEXICO

HYLSA Stell Group 3A, I, 142
 P. O. Box 996
 Monterrey, N. L.
 MEXICO
 51-20-20

THE NETHERLANDS

Philips Gloeilampenfabrieken 8L, I, 116
N. V.
Eindhoven
THE NETHERLANDS

Koninklijke/Shell-Laboratorium 2L, I, 78
Badhuisweg 3
Amsterdam
NETHERLANDS

Shell Oil Company 4L, 318; 1A, I, 188
Bataafse Internationale
Petroleum/Chemie My. NV
30 Carel V Bylandtlaan
The Hague
THE NETHERLANDS

NORWAY

A/S Computas 3H, 63
Okernveien 145
Oslo 5
NORWAY

SWEDEN

ASEA LME AUTOMATION 2R, I, 9
S-72183 Västerås
SWEDEN

SJ Centralfoervaltning BAS 3R, I, 17
Stockholm 10550
SWEDEN

SWITZERLAND

Brown Boveri and Cie
CH-5401 Baden
SWITZERLAND

2A, I, 228; 2R, I, 10;
3R, I, 10

Interautomation AG
CH-5702 Niederlenz
SWITZERLAND

2R, I, 13; 3R, I, 14

Landis Und Gyr Zentrallabor
CH-6300 Zug
SWITZERLAND

3R, I, 15

Sandoz AG
CH-4002 Basel
Lichestr. 35
SWITZERLAND

2R, I, 14; 3R, I, 16

Schweiz, Bundesbahnen
BAU GD
Mittelstrasse 43
CH-3000 Bern
SWITZERLAND

2R, I, 9; 3R, I, 17

Weber AG
Prozessrechentechnik
Sedelstrasse 2
CH-6020
Emmenbruecke
SWITZERLAND

3R, I, 19

UNITED KINGDOM

The British Steel Corporation
140 Battersea Park Road
London S. W. 11
ENGLAND

4L, 313; 2R, I, 9

Ferranti Ltd.
Bridge House
Gatley, Cheadle, Cheshire
UNITED KINGDOM

2L, I, 75

Ferranti Ltd. Simonsway, Wythenshawe Manchester ENGLAND M22 5LA	4L, 315; 3H, 64; 3R, I, 12
Ferranti, Ltd. Western Road Brackwell Berks. GREAT BRITAIN	3R, I, 12
GEC Computers Ltd. Elstree Way Borehamwood Hertfordshire WD6 1RX ENGLAND	2R, I, 11; 3R, I, 12
GEC Electrical Projects Ltd. Boughton Road Rugby Warwickshire ENGLAND	2R, I, 11
GEC-Elliott West Avenue Kidsgrove Stoke on Trent ENGLAND	2L, I, 75; 7L, 149
GEC-Elliott Process Automation Limited New Parks, Leicester ENGLAND LE9 8JP	5L, 193; 8L, I, 114; 9L, 93; 1A, I, 184; 2A, I, 231; 2R, I, 11; 3R, I, 12
G.E.C. - Elliott Traffic Automation Ltd. East Lane Wembley, Middlesex ENGLAND HA9 7PL	6L, 104
Imperial Chemical Industries Limited Central Instrument Research Lab. Bozdown House Whitchurch Hill Pangbourne, Reading Berkshire RG8 7PF ENGLAND	1L, 88; 2L, I, 76; 3L, I, 181; 4L, 316; 5L, 193; 8L, I, 115; 1A, I, 185; 2A, I, 232

Imperial Chemical Industries P. O. Box 11 The Heath, Runcorn Cheshire ENGLAND WA7 4QE	3A, I, 143
Imperial Chemical Industries, Limited (ICI) Mond Division North ICI Paints Slough ENGLAND	3R, I, 61
Kent Automation Systems 6 Hunting Gate Hirchin Hertfordshire GB-SG4 OT6 GREAT BRITAIN	2R, I, 13; 3R, I, 15
National Computer Centre Quai House Quai Street Manchester M3 3HV GREAT BRITAIN	2R, I, 13
National Computing Centre Oxford Road GM-M1 7ED Manchester GREAT BRITAIN	3R, I, 16
Royal Radar Establishment St. Andrew's Road Malvern Worcestershire GREAT BRITAIN	2R, I, 14; 3R, I, 16
Software Sciences, Ltd. London and Manchester House Park Street Macclesfield Cheshire GB-SK11 6SR GREAT BRITAIN	3R, I, 17

Systems Designers Ltd.
59-61 High Street
Frimley/Surrey
GREAT BRITAIN

2R, I, 15; 3R, I, 18

UNITED STATES

Allen Bradley Company
747 Alpha Drive
Highland Heights, Ohio 44143

7L, 147; 3H, 63

Allied Chemical Corporation
40 Rector Street
New York, New York 10006

1L, 85

Aluminum Company of America
1501 Alcoa Building
Pittsburgh, Pennsylvania 15219

1L, 85; 2L, I, 74; 3L, I, 179;
4L, 313; 5L, 191; 6L, 103;
7L, 147; 8L, I, 113; 9L, 91;
1H, 27; 2H, 115; 3H, 63;
1A, I, 181; 2A, I, 227;
3A, I, 139; 1R, 169;
2R, I, 71; 3R, I, 57

American Chain and Cable
Corporation (ACCO)
Bristol Division
40 Bristol Street
Waterbury, Connecticut 06720

1A, I, 181; 3A, I, 139;
1R, 169; 2R, I, 71;
3R, I, 57

American Oil Company
2400 New York Avenue
P. O. Box 431
Whiting, Indiana 46394

1L, 85; 1H, 27

Anchor Hocking Corporation
109 North Broad St.
Lancaster, Ohio 43130

8L, I, 113

Anchor Hocking Corporation
Plant 55
West Fair Avenue
Lancaster, Ohio 43130

3H, 63

Applied Automation Inc.
MS 215, R. B. No. 2
Electromechanical Lab/Phillips
Research Center
Bartlesville, Oklahoma 74003

1L, 89; 2L, I, 77
3L, I, 179; 4L, 313;
5L, 191; 3R, I, 57

Armco Steel Corporation
Research Center West
Middletown, Ohio 45043

1A, I, 181; 2A, I, 227

Automated Data and
Telecommunications Service
General Services Administration
18th and F. Street, N.W.
Washington, D. C. 20405

3A, I, 139

Babcock and Wilcox Company
P. O. Box 1260
Lynchburg, Virginia 24505

7L, 147; 1H, 27

Babcock and Wilcox Company
29801 Euclid Avenue
Wickliffe, Ohio 44092

2R, I, 71; 3R, I, 57

Bailey Meter Company
29801 Euclid Avenue
Wickliffe, Ohio 44092

1L, 85; 2L, I, 74; 3L, I, 179;
4L, 313; 5L, 191; 6L, 103;
7L, 147; 9L, 91; 1H, 27;
3H, 63; 1A, I, 181; 3A, I, 139;
1R, 169; 2R, I, 71

Baltimore Gas and Electric
Company
500 Gas and Electric Building
Lexington and Liberty Streets
Baltimore, Maryland 21203

1A, I, 182

Battelle Northwest
P. O. Box 999
Richland, Washington

1L, 85; 2L, I, 74;
3L, I, 179

Beloit Corporation
Control Systems Division
1 St. Lawrence
Beloit, Wisconsin 53511

2L, I, 74; 3L, I, 179

Bethlehem Steel Corporation Room 1585 Martin Towers 8th and Eaton Avenue Bethlehem, Pennsylvania 18018	2A, I, 228; 1R, 169; 2R, I, 72; 3R, I, 57
Bethlehem Steel Corporation Homer Research Labs Bethlehem, Pennsylvania 18016	7L, 148; 1R, 169; 2A, I, 228
B. F. Goodrich Chemical Company 6100 Oak Tree Boulevard Cleveland, Ohio 44131	2A, I, 227; 3A, I, 140; 1R, 169; 2R, I, 72; 3R, I, 58
Black, Crow and Eidsness P. O. Box 542 Chester Springs, Pennsylvania 19425	1A, I, 182
Black Crow and Eidsness, Inc. Subsidiary of Hercules, Inc. 1819 John F. Kennedy Boulevard Suite 434 Philadelphia, Pennsylvania 19103	2A, I, 228
Boeing Company 1401 West Smith Street Apartment 1017 Kent, Washington 98031	2A, I, 228
Bonner & Moore Associates, Inc. 500 Jefferson, Cullen Center Houston, Texas 77002	1L, 85; 2L, I, 74
Bonneville Power Administration P. O. Box 3521 (EKMA) Portland, Oregon 97208	1L, 85; 1A, I, 182
Caterpillar Tractor Company 600 West Washington Street Building W East Peoria, Illinois 61630	3R, I, 58; M, 183
Celanese Corporation P. O. Box 1414 Charlotte, North Carolina 28232	1H, 27; 2H, 115; 1R, 170; 3R, I, 58

Cincinnati Milacron Inc.
4701 Marburg Street
Cincinnati, Ohio 45213

1H, 28; M, 183

Cincinnati Milacron
Mason-Morrow Road
Lebanon, Ohio 45036

3A, I, 140

Collins Radio Company
5200 C Avenue N. E.
Mail Station 107-141
Cedar Rapids, Iowa 52401

4L, 314; 1R, 170

Collins Radio Group of
Rockwell International
5225 C Avenue N. E.
Cedar Rapids, Iowa 52406

2A, I, 228

Compata, Inc.
1 Militia Drive
Lexington, Massachusetts 02173

3L, I, 179

Computer Sciences Corporation
6565 Arlington Boulevard
Falls Church, Virginia 22042
Computer S

9L, 92

Computer Sciences Corporation
8300 South Whitesburg Drive
Huntsville, Alabama 35802

1A, I, 182; 2A, I, 229;
1R, 170

Computer Sciences Corporation
2251 San Diego Avenue
San Diego, California 92122

3R, I, 58

Continental Oil Company
Drawer 1267
Ponca City, Oklahoma 74601

1L, 86

Control Data Corporation
4455 East Gate Mall
La Jolla, California 92037

1L, 86; 2L, I, 74;
3L, I, 179; 4L, 314;
5L, 192; 6L, 103; 2H, 115;
1A, I, 182; 1R, 170

Corning Glass Works 918 W. 2nd Street W. Elmira, New York 14905	3L, I, 179
Corning Glass Works Control Engineering Department Building 37-4 Corning, New York 14830	1L, 86; 2L, I, 75; 4L, 314; 5L, 192
Cummins Engine Company, Incorporated 1000 5th Street Columbus, Indiana 47201	1H, 28; 2A, I, 229; 3R, I, 58; M, 183
Cutler-Hammer, Incorporated 4701 North 27th Street Milwaukee, Wisconsin 53216	7L, 148; 3R, I, 59
Data General Corporation Route 9 Southboro, Massachusetts 01772	7L, 148; 1A, I, 182; 3A, I, 140
Datum Incorporated 1363 South State College Boulevard Anaheim, California 92672	3A, I, 140; 3R, I, 59
Davis Computer Systems, Inc. 280 Park Avenue New York, New York 10017	1L, 86; 2L, I, 75; 3L, I, 180
Digital Applications, Inc. 866 Third Avenue New York, NY 10022	1L, 86
Digital Equipment Corporation 146 Main Street Maynard, Massachusetts 01754	1L, 86; 2L, I, 75; 3L, I, 180; 4L, 314; 5L, 192; 6L, 103; 7L, 148; 8L, I, 113; 9L, 92; 1A, I, 183; 2A, I, 229; 3A, I, 140; 1R, 170; 2R, I, 72; 3R, I, 59; M, 183

Digital Equipment Corporation One Iron Way Marlboro, Massachusetts 01752	2A, I, 229
Eastman Kodak Company Kodak Park Division 1460 Lake Avenue Bldg. 23 Area 6 Rochester, New York 14650	1L, 86; 2L, I, 75; 7L, 149; 8L, I, 114; 9L, 92; 1H, 28; 1A, I, 183
Ebasco Services, Incorporated 2 Rector Street New York, New York 10006	2L, I, 75 4L, 314; 9L, 92; 3A, I, 140; 2R, I, 72
E. I. du Pont de Nemours Company Louviers Building Wilmington, Delaware 19898	1L, 86; 2L, I, 75; 3L, I, 180; 5L, 192; 7L, 148; 1H, 28; 2H, 115; 1A, I, 183; 3A, I, 141; 2R, I, 72; 3R, I, 59
Eli Lilly and Company 1200 Kentucky Avenue Indianapolis, Indiana 46204	3H, 64
Eli Lilly and Company 307 East McCarty Street Indianapolis, Indiana 46206	2A, I, 230
EMR-COMPUTER Division of Weston Instruments 8001 Bloomington Freeway Minneapolis, Minnesota 55420	1H, 28
Entrekin Computers 9475 Center Road Fenton, Michigan 48430	M, 183
The Fenn Manufacturing Company Fenn Road Newington, Connecticut 06111	2A, I, 230
Fisher and Porter Company County Line Road Warminster, Pennsylvania 18974	1L, 87; 3R, I, 60

Fisher Controls Company
R. A. Engel Technical Center
Marshalltown, Iowa 50158

5L, 192; 7L, 149; 9L, 93;
1H, 28; 2A, I, 230;
3R, I, 59

Fluor Corporation
2500 South Atlantic
Los Angeles, California
90040

1H, 29, 1A, I, 183

Fluor Engineers and
Constructors, Inc.
3320 East La Plama
Anaheim, California 92806

2A, I, 230

Ford Motor Company
20000 Rotunda Drive
Dearborn, Michigan 48124

2L, I, 76; 3L, I, 180;
4L, 315

Ford Motor Company
WHQ
American Road
Room 527
Dearborn, Michigan 48121

7L, 149; 8L, I, 114; M, 183

Ford Motor Company
McKean and Textile Roads
P. O. Box 412
Ypsilanti, Michigan 48197

1L, 87

Ford Motor Company
21500 Oakwood
Dearborn, Michigan 48124

5L, 193; 6L, 104

The Foxboro Company
25 Neponset Avenue
Foxboro, Massachusetts 02035

1L, 87; 3L, I, 180;
4L, 315; 5L, 193; 6L, 104;
7L, 149; 8L, I, 114;
9L, 93; 1H, 29; 3H, 64;
1A, I, 184; 2A, I, 230;
3A, I, 141; 1R, 171;
3R, I, 60; M, 184

The Foxboro Company
38 Neponset Avenue
Foxboro, Massachusetts 02035

2L, I, 76; 2R, I, 73

Frankford Arsenal
Bridge and Tacony Streets
Philadelphia, Pennsylvania
19137

8L, I, 114

General Atomic Company
P. O. Box 81608
San Diego, California 92138

2A, I, 231; 1R, 171

General Electric Company
2255 West Desert Cove Road
Phoenix, Arizona 85029

1L, 87; 2L, I, 76; 3L, I, 180;
4L, 315; 7L, 149; 9L, 93;
1A, I, 184

General Electric Company
Special Purpose Computer
Center
Mail Drop 21DW
1285 Boston Avenue
Bridgeport, Connecticut 06602

3A, I, 141; 2R, I, 73;
3R, I, 60

General Electric Company
Information Services
823 Commerce Drive
Suite 302
Oak Brook, Illinois 60521

M, 184

General Electric
40 Federal Street
Lynn, Massachusetts 01910

5L, 193; 6L, 104

General Electric Company
Advanced Controls and N/C
Systems
Large Steam Turbine -
General Dept.
273 North Avenue
Room 2300
Schenectady, New York 12345

M, 184

AD-A036 476 PURDUE UNIV LAFAYETTE IND PURDUE LAB FOR APPLIED IND--ETC F/6 9/2
AN INDEX TO THE MINUTES OF THE INTERNATIONAL PURDUE WORKSHOP ON--ETC(U)
JAN 77 T J WILLIAMS N00014-76-C-0732
UNCLASSIFIED 88 NL

PURDUE UNIV LAFAYETTE IND PURDUE LAB FOR APPLIED IND--ETC F/G 9/2
AN INDEX TO THE MINUTES OF THE INTERNATIONAL PURDUE WORKSHOP ON--ETC(U)
JAN 77 T J WILLIAMS N00014-76-C-0732

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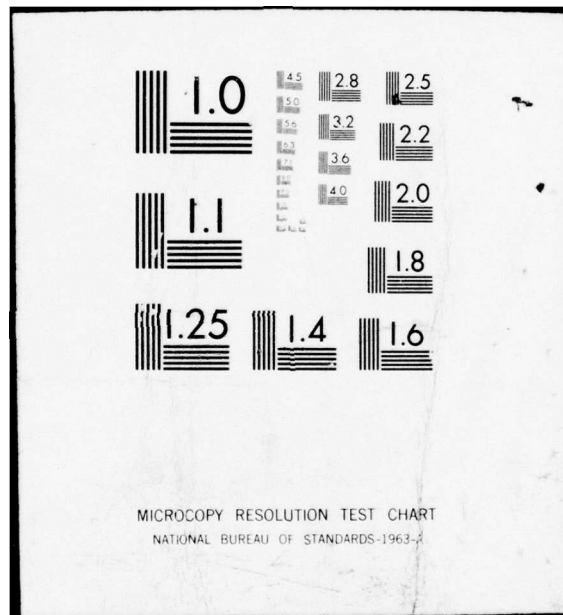
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The Foxboro Company
38 Neponset Avenue
Foxboro, Massachusetts 02035

2L, I, 76; 2R, I, 73

Frankford Arsenal
Bridge and Tacony Streets
Philadelphia, Pennsylvania
19137

8L, I, 114

General Atomic Company
P. O. Box 81608
San Diego, California 92138

2A, I, 231; 1R, 171

General Electric Company
2255 West Desert Cove Road
Phoenix, Arizona 85029

1L, 87; 2L, I, 76; 3L, I, 180;
4L, 315; 7L, 149; 9L, 93;
1A, I, 184

General Electric Company
Special Purpose Computer
Center
Mail Drop 21DW
1285 Boston Avenue
Bridgeport, Connecticut 06602

3A, I, 141; 2R, I, 73;
3R, I, 60

General Electric Company
Information Services
823 Commerce Drive
Suite 302
Oak Brook, Illinois 60521

M, 184

General Electric
40 Federal Street
Lynn, Massachusetts 01910

5L, 193; 6L, 104

General Electric Company
Advanced Controls and N/C
Systems
Large Steam Turbine -
General Dept.
273 North Avenue
Room 2300
Schenectady, New York 12345

M, 184

General Electric Company Building 300-3C 1 Nott Street Schenectady, New York 12345	M, 184
General Electric Company Aircraft Engine Group Interstate 75 Mail Drop A-107 Evendale, Ohio 45215	M, 184
General Motors Corporation 2401 Columbus Avenue Anderson, Indiana 46011	6L, 104
General Motors Corporation Delco Electronics Division Monitoring and Control Systems Group MS R221 1800 East Lincoln Road Kokomo, Indiana 46901	3R, I, 60
General Motors Corporation GM Technical Center 12 Mile and Mound Road Warren, Michigan 48090	7L, 149; 8L, I, 115; 9L, 93; 1H, 29; 2H, 116; 1A, I, 184; 2A, I, 231; 3R, I, 60
General Motors Institute 1700 West Third Avenue Flint, Michigan 48502	M, 184
Goodyear Tire and Rubber Company 1144 East Market Street Akron, Ohio 44316	7L, 150
Gulf Energy and Environmental Systems 10955 John Jay Hopkins Drive P. O. Box 81608 San Diego, California 92138	9L, 94; 3H, 64

Gulf Oil Corporation
P. O. Box 608
San Diego, California 92112

2H, 116; 1A, I, 184

Hewlett-Packard Company
395 Page Mill Road
Palo Alto, California 94306

1L, 87; 2L, I, 76; 4L, 315;
5L, 193; 6L, 105; 7L, 150

Hewlett-Packard
974 East Arques Avenue
Sunnyvale, California 94086

8L, I, 115; 9L, 94;
1A, I, 184; 2A, I, 231;
1R, 171

Hewlett-Packard
11000 Wolfe Road
Cupertino, California 95014

3L, I, 181; 3A, I, 142;
2R, I, 73; M, 184

Honeywell, Incorporated
2222 West Peoria Avenue
Phoenix, Arizona 85018

3A, I, 142

Honeywell Incorporated
2600 Ridgway Parkway
Minneapolis, Minnesota 55413

9L, 94

Honeywell, Incorporated
Process Control Division/
Phoenix
2255 West Desert Cove Road
Phoenix, Arizona 85029

2A, I, 232; 2R, I, 73;
3R, I, 61; 1R, 172

Honeywell, Inc.
Old Connecticut Path
Framingham, Massachusetts
01701

1L, 87; 3L, I, 181; 4L, 316;
6L, 105; 7L, 150

Honeywell Incorporated
Honeywell Information Systems
200 Smith Street
Waltham, Massachusetts 02154

7L, 150

Honeywell, Incorporated
Process Control Division
MS 105
1100 Virginia Drive
Fort Washington, Pennsylvania
19034

7L, 150; 1R, 171

Honeywell Incorporated
Industrial Division
1100 Virginia Drive
Fort Washington, Pennsylvania
19034

8L, I, 115; 9L, 94; 1H, 29;
2H, 116; 1A, I, 185

Honeywell, Incorporated
1500 West Dundee Road
Arlington Heights, Illinois
60004

9L, 94; 1R, 171

Hughes Aircraft Company
Centinela and Teale Streets
MS V106
Culver City, California 90230

1R, 172

Humble Oil and Refining Company
P. O. Box 551
Baton Rouge, Louisiana 70821

2L, I, 76; 1H, 29

Humble Oil & Refining Company
P. O. Box 2180
Houston, Texas 77001

1L, 87

IBM Corporation
Data Processing Division
1133 Westchester
White Plains, New York 10604

1L, 88; M, 185

IBM Corporation
System Communications Division
P. O. Box 6
Endicott, New York 13760

M, 185

IBM Corporation
700 Banyon Trail
Boca Raton, Florida 33432

3L, I, 181

IBM Corporation
P. O. Box 1328
26V/031-2
Boca Raton, Florida 33432

2L, I, 76; 4L, 316; 5L, 194;
6L, 105; 7L, 150; 9L, 94;
1H, 30; 2H, 116; 3H, 64;
1A, I, 185; 2A, I, 231;
3A, I, 143; 1R, 172;
2R, I, 12, 73; 3R, I, 38 61;
M, 184

IBM Corporation
General Systems Division
2000 51st Street
Boca Raton, Florida 33432

8L, I, 115; 3A, I, 143

IBM Corporation
Monterey and Cottle Roads
San Jose, California

1L, 88

IBM Corporation
6900 Fannin Street
Houston, Texas 77025

1L, 88

IBM Corporation
P. O. Box 390
Poughkeepsie, New York

2A, I, 232

Industrial Nucleonics,
Incorporated
P. O. Box 4887
650 Ackerman Road
Columbus, Ohio 43202

8L, I, 115; 9L, 95;
1A, I, 185; 2A, I, 232;
3A, I, 143; 1R, 172;
2R, I, 74; 3R, I, 62

Information General Corporation
6355 Topanga Canyon Boulevard
Woodland Hills, California
91364

1L, 88

Inland Steel Company
Indiana Harbor Works
3210 Watling Street
East Chicago, Indiana 46312

1L, 88; 2L, I, 77;
3L, I, 180; 4L, 316;
5L, 194; 6L, 104; 9L, 95;
3H, 64; 1A, I, 186;
2A, I, 233; 3A, I, 143;
1R, 172; 2R, I, 74; 3R, I, 62

Innovators Incorporated
348 Maple Avenue
Edgewood, Pennsylvania 15218

1H, 29

Interdata Incorporated 2 Crescent Place Oceanport, New Jersey 07757	1A, I, 186; 2A, I, 233; 3A, I, 144; 1R, 172
Intermetrics Incorporated 701 Concord Avenue Cambridge, Massachusetts 02138	3R, I, 14, 62
International Harvester Company 401 North Michigan Avenue Chicago, Illinois 60611	M, 185
International Paper Company Jay, Maine 04239	7L, 151
J. F. Pink Associated P. O. Box 25 Huntingdon Valley Pennsylvania 19006	1H, 30
John Deere Waterloo Tractor Works Box 270 P. E. Waterloo, Iowa 50704	9L, 95
Johnson Controls, Incorporated 507 East Michigan Avenue Milwaukee, Wisconsin 63201	1A, I, 186; 2A, I, 233; 3A, I, 144; 1R, 173; 3R, I, 62
Jones and Laughlin Steel Corporation 900 Agnew Road Pittsburgh, Pennsylvania 15230	1A, I, 186
Joseph E. Seagram Inc. P. O. Box 204 Louisville, Kentucky 40201	1H, 30
Kaiser Aluminum & Chemical Corp. Kaiser Center 300 Lakeside Drive Oakland, California 94604	1L, 88; 2L, I, 77; 3L, I, 181; 4L, 316; 5L, 194; 6L, 105; 9L, 95

Kinetic Systems Corporation
Maryknoll Drive
Lockport, Illinois 60441

2H, 116; 3H, 65;
1A, I, 186; 3A, I, 144;
1R, 173; 2R, I, 74;
3R, I, 62

Leeds and Northrup Company
Dickerson Road
M/D 130
North Wales, Pennsylvania
19454

1L, 88; 2L, I, 77; 3L, I, 181;
4L, 317; 5L, 194; 6L, 105;
7L, 151; 1H, 30; 2H, 116;
3H, 65; 1A, I, 186; 3A, I, 144;
1R, 173; 2R, I, 74; 3R, I, 62

3M Company
900 Bush Avenue
St. Paul, Minnesota

7L, 151

3M Company
P. O. Box 33331
St. Paul, Minnesota 55133

1A, I, 187

Massachusetts Computer
Associates
Lakeside Office Park
Wakefield, Massachusetts 01880

8L, I, 116

Mead Corporation
Chillicothe, Ohio 45601

1L, 88

Measurex Corporation
10475 Imperial Avenue
Cupertino, California 95014

7L, 151

Merck and Company, Incorporated
126 East Lincoln Avenue
Rahway, New Jersey 07065

1L, 88; 2L, I, 77;
3L, I, 181; 4L, 317;
5L, 194; 1R, 173

Middle South Services,
Incorporated
P. O. Box 61000
New Orleans, Louisiana 70161

9L, 96; 1A, I, 187;
2A, I, 234; 3A, I, 144;
1R, 173; 2R, I, 75;
3R, I, 63

Modular Computer Systems
1650 West McNab Road
Fort Lauderdale, Florida
33309

3L, I, 182; 9L, 96;
1A, I, 187; 2A, I, 234;
3A, I, 144; 1R, 173;
2R, I, 75; 3R, I, 63

Monsanto Company 800 N. Lindbergh Blvd. St. Louis, MO 63166	1L, 89; 4L, 317
National Steel Corporation 2800 Grant Building Pittsburgh, Pennsylvania 15219	1L, 89
North Electric Company Galion, Ohio	2L, I, 77
Owens-Corning Fiberglas Corporation Case Avenue Newark, Ohio 4355	1L, 89; 2L, I, 77; 3L, I, 182; 5L, 195; 6L, 105; 7L, 151; 2A, I, 234
Owens-Illinois, Incorporated 1700 N. Westwood Avenue P. O. Box 1035 Toledo, Ohio 43666	1A, I, 187; 3R, I, 63
Pennsylvania Power and Light Company 901 Hamilton Street Allentown, Pennsylvania 18101	2H, 117
Pennsylvania Power and Light Company Two North Ninth Street Allentown, Pennsylvania 18101	3R, I, 63
PPG Industries, Incorporated P. O. Box 11472 Pittsburgh, Pennsylvania 15238	8L, 116; 1H, 30
PPG Industries, Incorporated One Gateway Center Pittsburgh, Pennsylvania 15222	2A, I, 234; 3A, I, 145; 1R, 174; 2R, I, 75; 3R, I, 64
Procter and Gamble Company Winton Hill Technical Center 6300 Center Hill Road Cincinnati, Ohio 45224	2L, I, 78; 2R, I, 75; 3R, I, 64
Procter and Gamble Company P. O. Box 559 Cincinnati, Ohio 45201	9L, 96; 3H, 65; 2A, I, 234; 1R, 174

Profimatics, Inc.
3110 Southwest Highway
Houston, Texas 77006

1L, 89; 2L, I, 78;
3L, I, 182

Radio Corporation of America
(RCA)
Moorestown, New Jersey 08057

2H, 117

Reliance Electric Company
750 North Maple Road
Saline, Michigan 48176

2H, 117

Scientific Systems Services,
Incorporated
476 North Highway 1A
P. O. Box 2519
Satellite Beach, Florida 32937

9L, 96

Scott Paper Company
Scott Plaza III
Philadelphia, Pennsylvania 19113

1L, 89; 3L, I, 182; 4L, 318;
5L, 195; 9L, 96; 2A, I, 235;
1R, 174; 2R, I, 76; 3R, I, 64;
M, 185

Shell Development Company
P. O. Box 481
Houston, Texas 77001

2A, I, 235; 2R, I, 76

Shell Oil Company
P. O. Box 100
Deerpark, Texas 77536

3L, I, 182

Shell Oil Company
P. O. Box 2463
Houston, Texas 77001

2A, I, 235; 2R, I, 76

Shell Pipeline Corporation
P. O. Box 2648
Houston, Texas 77001

9L, 97

Shimadu Seisakusho Ltd.
633 Third Avenue
New York, New York 10017

2L, I, 78

Softech 391 Totten Pond Road Waltham, Massachusetts 02154	7L, 152
Solidstate Controls, Incorporated 600 Oakland Park Avenue Columbus, Ohio 43214	3H, 65
Standard Engineering Corporation 44800 Industrial Drive Fremont, California 94538	3R, I, 64
Standard Oil Company P. O. Box 400 Naperville, Illinois 60540	9L, 97
The Standard Oil Company of Ohio Midland Building Cleveland, Ohio 44115	3A, I, 146; 2R, I, 76; 3R, I, 64
Stone & Webster Engineering Corp. 225 Franklin Street Boston, Massachusetts 02107	1L, 89; 2L, I, 78; 3L, I, 182
Sun Oil Company P. O. Box 426 Marcus Hook, Pennsylvania 19061	1L, 89; 2L, I, 78; 3L, I, 182; 8L, I, 116; 1A, I, 138
Sun Oil Company 1608 Walnut Street Philadelphia, Pennsylvania 19103	5L, 195
Sunstrand Machine Tool Company 3615 Newburg Road Belvidere, Illinois 61008	M, 186
Systems Engineering Laboratories 6901 West Sunrise Boulevard P. O. Box 9148 Fort Lauderdale, Florida 33310	1L, 90; 9L, 9

Taylor Instrument
Process Control Division of
the Sybron Corp.
95 Ames Street
Rochester, New York 14601

1L, 90; 7L, 152; 1H, 31;
2H, 117; 3H, 66; 1A, I, 188;
2A, I, 236; 3A, I, 146;
1R, 174; 2R, I, 77;
3R, I, 65

Taylor Instrument
Process Control Division of
the Sybron Corporation
1100 Jefferson Road
Rochester, New York 14601

3A, I, 146

Taylor Instrument
Process Control Division of
the Sybron Corporation
46 Prince Street
Rochester, New York, 14607

3H, 66; 1A, I, 188

Tenneco Incorporated
P. O. Box 2511
Houston, Texas 77001

1H, 31; 2H, 118;
1A, I, 189

Tennessee Eastman Company
Building 54B
P. O. Box 511
Kingsport, Tennessee 37662

7L, 152; 8L, I, 117;
9L, 97; 2A, I, 236;
3A, I, 146; 1R, 175;
3R, I, 65

Texas Instruments,
Incorporated
P. O. Box 1444
Houston, Texas 77001

6L, 106; 9L, 97

Texas Instruments,
Incorporated
12501 Research Boulevard
P. O. Box 2909
Austin, Texas 78767

2A, I, 236; 3A, I, 146;
2R, I, 77; 3R, I, 65

Texas Instruments
12203 Southwest Freeway
Houston, Texas 77006

6L, 106

Union Carbide Corporation Technical Center, Building 2000/320 P. O. Box 8361 South Charleston, West Virginia 25303	1L, 90; 2L, I, 79; 3L, I, 182; 4L, 318; 5L, 196; 6L, 106; 8L, I, 117; 9L, 98; 1H, 31; 2H, 118; 3H, 66; 1A, I, 189; 2A, I, 236; 3A, I, 147; 1R, 175; 2R, I, 77; 3R, I, 65
Union Oil Company of California 200 East Golf Road Palatine, Illinois 60067	8L, I, 117; 9L, 97
Uniroyal Chemical Elm Street Naugatuck, Connecticut 06770	1L, 90
United States Steel Corporation One North Broadway Gary, Indiana 46402	3R, I, 65
United States Steel Corporation 600 Grant Street Pittsburgh, Pennsylvania 15230	1H, 31; 3R, I, 66
United States Steel Corporation 525 William Penn Place-1614F Pittsburgh, Pennsylvania 15230	1L, 90; 2L, I, 79
Universal Oil Products Company 20 U.O.P. Plaza Mount Prospect and Algonquin Roads Des Plaines, Illinois 60016	8L, I, 117; 2R, I, 77
University Computing Company 120 South Riverside Plaza Chicago, Illinois 60606	M, 186
The Upjohn Company 7171 Portage Street Kalamazoo, Michigan 49001	3H, 66

Varian Data Machines 611 Hansen Way Palo Alto, California 94303	2H, 118
Varian Data Machines 2722 Michelson Drive Irvine, California 92664	7L, 152
WADCO Corporation P. O. Box 1970 Richland, Washington 99352	4L, 319; 5L, 196; 6L, 106
Warner and Swasey Company 5701 Carnegie Avenue Cleveland, Ohio 44103	M, 186
West Virginia Pulp and Paper Westvaco Building 299 Park Avenue New York, New York 10017	1L, 90
Western Electric Company Naperville, Illinois 60540	1A, I, 190; 1R, 175
Western Electric Company P. O. Box 900 Princeton, New Jersey 08540	1L, 90
Western Electric Company 3300 Lexington Road Winston Salem, North Carolina 27103	2A, I, 237; 3A, I, 147; 1R, 175; 2R, I, 78; 3R, I, 66
Western Electric Company, Inc. 204 Graham-Hopedale Road Burlington, North Carolina 27215	1L, 90; 2L, I, 79; 3L, I, 183; 5L, 196; 6L, 106; 7L, 153
Western Electric Company 4513 Western Avenue Lisle, Illinois 60532	3R, I, 66

Westinghouse Electric Corporation 200 Beta Drive Pittsburgh, Pennsylvania 15238	1L, 90; 2L, I, 79; 3L, I, 183; 4L, 319; 7L, 153; 8L, I, 118; 9L, 98; 1H, 32; 2A, I, 237; 3A, I, 147; 3R, I, 66; M, 186
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Westinghouse Electric Corporation 2040 Ardmore Boulevard Pittsburgh, Pennsylvania 15521	M, 186
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Westinghouse Electric Corporation P. O. Box 22005 Tempe, Arizona 85281	3R, I, 66
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Westinghouse Electric Corporation 1200 West Colonial Drive Orlando, Florida 32804	2A, I, 237; 3A, I, 147; 2R, I, 78; 3R, I, 66
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Westinghouse Hanford Company P. O. Box 1970 Richland, Washington 99352	7L, 153; 1H, 32; 2A, I, 237
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Westvaco Corporation P. O. Box 5207 North Charleston, South Carolina 29406	3L, I, 183; 5L, 196
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Weyerhaeuser Company 3100 B Napoleon Court Birmingham, Alabama 35243	7L, 153; 1H, 32
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Whirlpool Corporation Monte Road Benton Harbor, Michigan 49022	7L, 153; 8L, I, 118
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RESEARCH INSTITUTES

CANADA

National Research Council
of Canada
Building M3
Montreal Road
Ottawa
Ontario
CANADA K1A 0R6

2A, I, 234; 3A, I, 145;
2R, I, 75; 3R, I, 63

DENMARK

AEK Risø
Danish Atomic Energy Computer
Research Establishment
D-4000 Roskilde
DENMARK

2R, I, 9; 3R, I, 9

EGYPT

Atomic Energy Research
Establishment
Atomic Energy Post Office
Cairo
EGYPT

3R, I, 9

FRANCE

Institute de Programmation
Paris Cedex 05
4 Place
Jussieu-Tou 43
F-75230 FRANCE

2R, I, 13

Institute Max v. Laue-Paul
Langevin
Centre Detri
BP 156
38042 Grenoble
FRANCE

2R, I, 13

GERMANY

Inst. F. Angew
Informatik Und Formale
Beschreibungsverfahren
D-7500 Karlsruhe 1
GERMANY

3R, I, 13

Institute f. Datenverarbeitung
in der Technik
Kernforschungszentrum
Postfach 3640
D-7500 Karlsruhe
GERMANY

2R, I, 13

Institut fuer Informatik
Technische Universität
München 21
Arcisstrasse, Muenchen 2
GERMANY D8000

3A, I, 143

Institute fuer Informations-
Verarbeitung In Technik Und
Biologie
Seb.-Kneipp-Str. 12-14
D-7500 Karlsruhe
GERMANY

3R, I, 14

Inst. fuer Verfahrenstechnik
und Dampfkesselwesen der
Universität Stuttgart
7000 Stuttgart 80
Pfaffenwaldring 23
GERMANY

7L, 150; 3R, I, 14

Laboratorium f. Reaktorregelung
Reaktorstation
D-8046
Garching
GERMANY

2R, I, 13; 3R, I, 15

Technische Hochschule Aschen 3R, I, 18
Laboratory fuer Werkzeugmaschinen
Und Betriebslehre
Wuellnerstrasse 5
D-5100 Aachen
GERMANY

TU Braunschweig 3R, I, 18
Institute F. Verkehr
Eisenbahnwesen Und
Verkehrssicherung
Pockelstrasse 4
D-3300 Braunschweig
GERMANY

HUNGARY

Hungarian Academy of Science 2R, I, 12
Central Measurement Research
Laboratory
POB 205
H-1368 Budapest
HUNGARY

Hungarian Academy of Science 2R, I, 12; 3R, I, 14
Central Research Institute for
Physics
POB 49
H-1525 Budapest
HUNGARY

Hungarian Academy of Science 2R, I, 12; 3R, I, 14
Institute of Computing and
Automation
Kende u. 13-17
H-1502 Budapest XI
HUNGARY

ITALY

Lab. Automazione E Controllo 3R, I, 15
C.N.E.N.-C.S.N. Casaccia
Via Anguillarese KM. 1+300
I-00060, Roma
ITALY

JAPAN

Hitachi Central Research Lab 2R, I, 40
Kokubunji
Tokyo
JAPAN

THE NETHERLANDS

Philips Research Laboratories 2R, I, 14; 3R, I, 16
WY4
Eindhoven
NETHERLANDS

NORWAY

Christian Michelsen Institute 2L, I, 74
Bergen
NORWAY

Institute for Atomic Energy 2L, I, 77
Halden
NORWAY

SINTEF, 2L, I, 78; 4L, 318; 6L, 106;
Division of Automatic Controls 8L, I, 116; 1H, 31; 2H, 117;
The Norwegian Institute of 1A, I, 188; 2A, I, 235;
Technology 3A, I, 146; 1R, 174;
N-7034 Trondheim-NTH 2R, I, 9, 76; 3R, I, 17
NORWAY

POLAND

Industrial Institute of 2A, I, 232; 2R, I, 13
Automation and Measurements
Al. Jerozolimskie 202
02-222 Warszawa
POLAND

SWEDEN

National Defense Research 2R, I, 13; 2A, I, 235
Institute
S-10450 Stockholm 80
SWEDEN

National Defense Research
Institute
Division of Biotechnology
Box 27 115
S-10450 Stockholm 80
SWEDEN

2R, I, 13; 3R, I, 16

SWITZERLAND

Eidgenossische Technische
Hochschule
Hybrid-RZ ETHZ
Voltastr. 18
CH-8044 Zurich
SWITZERLAND

2R, I, 11; 3R, I, 11

EIDG. Technische Hochschule
Institute fuer Automatik
Gloriastr. 35
CH-8044
Zurich
SWITZERLAND

3R, I, 11

ETH Zurich
Dolderstr. 60
CH-8032 Zurich
SWITZERLAND

3R, I, 11

ETH Zurich
Institute fuer Informatik
ETH-Zentrum
8092 Zurich
SWITZERLAND

3R, I, 11

ETH Zurich
Tannenrauchstr, 35319
CH-8038 Zurich
SWITZERLAND

3R, I, 11

ETH Zurich
Wuhrstr. 20
CH-8003 Zurich
SWITZERLAND

3R, I, 11

UNITED KINGDOM

Atkins Research and Development 2A, I, 227
4 Dorking Road
Epsom, Surrey
UNITED KINGDOM

Atkins Research and Development 3R, I, 9
Woodcote Grove
Epsom
Surrey
GREAT BRITAIN

Atomic Energy Research 2R, I, 9; 3R, I, 9
Establishment
Harwell
Didcot
Oxon OX11 0RA
GREAT BRITAIN

Office of Naval Research 3R, I, 16
223 Old Marylebone Road-
GB-NW15 TKI
London
ENGLAND

USSR

Central Scientific Research 3R, I, 13
Institute of Complex
Automation
USSR - MOSKOV

Institute of Control Computers, 3R, I, 14
ICC
USSR-MOSKOV

Kiev Politechnical Institute 2R, I, 74
Department of Technical
Cybernetics
Brest-Litovsky pros. #39
c. Kiev-40
USSR

UNITED STATES

Battelle Columbus Laboratories 505 King Avenue Columbus, Ohio 43201	1A, I, 182
Burr-Brown Research Corporation P. O. Box 11400 Tucson, Arizona 85734	2A, I, 228
Burr-Brown Research Corporation 5730 South Tucson Boulevard Tucson, Arizona 85706	3A, I, 140; 1R, 170
Chevron Research Company 576 Standard Avenue Richmond, California 94802	1L, 86
Electro-Mechanical Research, Inc. EMR Computer Division 8001 Minnesota 55420	1L, 87
Exxon Research and Engineering Company Mathematical Computers and Systems Department P. O. Box 153 Florham Park, New Jersey 07932	1L, 87; 2L, I, 75; 3L, I, 180; 1H, 28; 2H, 115; 1A, I, 183; 2R, I, 72; 3R, I, 59
IIT Research Institute 10 West 35 Street Chicago, Illinois 60616	1L, 87
Lawrence Livermore Laboratory 320 North Main Street Ann Arbor, Michigan 48104	M, 185

Lawrence Livermore Laboratory P. O. Box 808 L-152 Livermore, California 94550	M, 185
Los Alamos Scientific Laboratory P. O. Box 1663 Los Alamos, New Mexico 87545	9L, 95; 1A, I, 187; 2A, I, 233; 3A, I, 144; 1R, 173; 2R, I, 75; 3R, I, 63
Mobil Research & Development Corp. 150 East 42nd Street New York, NY 10017	2L, I, 77
NASA, Lewis Research Center 21000 Brookpark Road Cleveland, Ohio 44135	1A, I, 187; 2R, I, 75
Naval Electronics Laboratory Code 5200, 271 Catalina Boulevard Department of the Navy San Diego, California 92152	3A, I, 145; 3R, I, 18
Oak Ridge National Laboratory Bldg. 3500 P. O. Box X Oak Ridge, Tennessee 37830	1H, 30
Stanford Research Institute 333 Ravenswood Avenue Menlo Park, California 94025	1L, 89; M, 186
United States Naval Electronics Laboratory Center Code 5200 271 Catalina Boulevard San Diego, California 92152	3R, I, 65

UNIVERSITIES

AUSTRALIA

University of New South Wales 8L, I, 117
Anzac Parade
Kensington
AUSTRALIA 2033

FRANCE

Universite P. & M. Curie 3R, I, 19
Paris 6
19 Rue Vergniaud
F-75013 Paris
FRANCE

GERMANY

Ruhr-Universitaet Lehrstuhl 3R, I, 16
Fuer Datenverarbeitung
Postfach 2148
D-4630 Bochum
GERMANY

Technical University Munich 7L, 152; 9L, 97; 1A, I, 189;
Mathematische Institute 2A, I, 236; 2R, I, 15;
Arcisstrasse 21 3R, I, 18
P. O. Box 202420
8000 Munich 2
GERMANY (FGR)

Technical University of Munich 2A, I, 236; 2R, I, 15;
Laboratory fur Reaktorregelung 3R, I, 18
and Reaktorstation
D8046 Garching
GERMANY

University of Erlangen 4L, 315; 5L, 192; 6L, 104;
Physics Institute III 7L, 152; 8L, I, 117; 9L, 92;
Tandemlabor, Erwin-Rommel- 1A, I, 189; 2A, I, 236;
Strasse 1/ D-852, Erlangen 3A, I, 147; 2R, I, 16;
GERMANY D-8520 3R, I, 19, 66

University of Freiburg
Hermann-Herder Str. 1
D-78 Freiburg i. B.
GERMANY

2R, I, 16

University of Stuttgart
Institute for Industrial
Technology and Steam
Boiler Science
Pfaffenwaldring 23
Stuttgart
GERMANY 7000

1A, I, 189

Universitat Stuttgart
Seidenstrasse 36
Stuttgart D-7500
GERMANY

2A, I, 236; 3A, I, 147;
2R, I, 16; 3R, I, 19

JAPAN

Kumamoto University
Faculty of Engineering
Kumamoto 860
JAPAN

1A, I, 186

University of Tokyo
Bunkyo-ku
7-3-1 Hongo, Tokyo
JAPAN 113

1A, I, 190; 3A, I, 147;
3R, I, 36

University of Yokohama
2-31-1 Ohoka
Minami-ku
Yokohama
JAPAN

3R, I, 37

THE NETHERLANDS

Technical University of
Eindhoven
POB J13
Insulindelaan 2
Eindhoven
NETHERLANDS

2R, I, 15

Twente University of Technology POB 217 Lupenstraat 32 Enschede NETHERLANDS	2R, I, 15
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SWITZERLAND

Hybridrechenzentrum der ETH Voltastrasse 18 CH-8044 Zurich SWITZERLAND	3A, I, 142
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UNITED KINGDOM

Imperial College London ENGLAND	2L, I, 76
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University of Nottingham University Park Nottingham ENGLAND	2L, I, 78
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University of York Heslington York YO15DD GREAT BRITAIN	2R, I, 16; 3R, I, 19
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UNITED STATES

Arizona State University Psychology Department Tempe, Arizona 85281	2R, I, 71
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Carnegie-Mellon University Schenley Park Pittsburgh, Pennsylvania 15213	3A, I, 140; 1A, 183
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Case-Western Reserve University University Circle Cleveland, Ohio 44106	1L, 85; 9L, 91
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Indiana University
Mathematical Models Laboratory
Department of Psychology
Psychology Building
Bloomington, Indiana 47401

2A, I, 232

Purdue University
Purdue Laboratory for Applied
Industrial Control
102 Michael Golden
West Lafayette, Indiana 47907

1L, 89; 4L, 317; 5L, 195;
6L, 106; 7L, 152; 8L, I, 116;
9L, 96; 1H, 31; 2H, 117;
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